

December 8, 2015

Mr. Matt Cutshall
Environmental Compliance Manager
Sheetz, Inc.
351 Sheetz Way
Claysburg, PA 16625

RE: **Supplemental Phase 2 Environmental Site Assessment Report**
Proposed Sheetz Location
North Graham Hopedale Road and North Church Street, Burlington, NC

Dear Mr. Cutshall:

Groundwater & Environmental Services, Inc. (GES) is pleased to provide the following *Supplemental Phase 2 Environmental Site Assessment (ESA) Report* to Sheetz, Inc. (Sheetz). This investigation was conducted at the request of Sheetz in order to provide an additional assessment of soil and groundwater at the above referenced property concentrated on the western portion of the property. On October 13, 2015, GES submitted the *Limited Phase 2 ESA* to Sheetz documenting the activities and findings of previous investigation of the property identified by Sheetz for potential development of a Sheetz retail petroleum facility.

1.0 ENVIRONMENTAL SITE ASSESSMENT

The location of the Subject Property and surrounding area is illustrated on the Site Location Map presented on the U.S. Geological Survey (USGS) 7.5-Minute Topographic Map for Burlington, North Carolina (1981) as **Figure 1**. The Subject Property is located in a mixed industrial, commercial, and residential area of Burlington, North Carolina. There are commercial properties located to the south and west, government properties to the north, residential properties to the east and a large former industrial facility to the northwest, as shown in the Local Area Map, **Figure 2**. The Subject Property consists primarily of impermeable pavement which is bisected by an old section of railroad track running northwest to southeast. The Subject Property is illustrated on the Site Map presented as **Figure 3**.

On November 16 and 17, 2015, GES supervised the advancement of nine soil borings (SS-1 through SB-9) on the western portion of the Subject Property. The soil borings were advanced to investigate the extent of existing contamination from previous uses of the Subject Property or the migration of contaminants from surrounding properties. SS-1 through SS-5 were advanced in the southwest corner of the Subject Property to investigate the location of the proposed island fuel dispensers and their respective three Underground Storage Tanks (USTs). SS-6 and SS-7 were installed in the vicinity of the proposed Sheetz store location. SB-8 was installed in the proposed location of the car wash drive-thru. SS-9 was installed along the old section of railroad track. The nine soil borings were advanced via direct-push technology and advanced to a depth of 25 feet below ground surface (bgs). The soil boring locations are shown on **Figure 4**. Following

soil boring completion, a temporary well was placed into boreholes SS-2, SS-4, SS-7 and SS-8, identified as GW-1 through GW-4, respectively, in an attempt to collect a water sample. Each temporary well was comprised of a PVC one-inch diameter well screen and allowed to collect water for a minimum of one hour. Water samples were collected from all four temporary wells GW-1 through GW-4.

1.1 Soil Sampling and Results

One soil sample was collected from each of the borings at the interval corresponding to the highest value detected with a photo-ionization detector (PID). If no PID response was observed, the soil sample was collected directly above the observed water table. Following the collection of each sample, the sample was split into two parts. One part of the sample was placed into a zip-lock bag for field screening. The zip-lock bags of soil were screened with a PID to measure the concentration of volatile organic compounds (VOCs) within the headspace. The PID values from the soil samples collected for laboratory analysis are included in **Table 1**. The second part of the sample was placed into the laboratory supplied soil sampling bottleware, immediately labeled, and placed on ice in a cooler in preparation for laboratory analysis.

The soil samples were submitted to Air Water & Soil Laboratories (AWS) located at 1941 Reymet Road, Richmond, VA for analysis of the site specific constituents of concern (COCs) including: benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), and naphthalene via USEPA Method SW8260B, total petroleum hydrocarbons - gasoline range organics (TPH-GRO) and total petroleum range hydrocarbons - diesel range organics (TPH-DRO) via USEPA Method 8015C, and RCRA 8 metals via Method SW6010C and Method SW7471B. Soil samples collected from SS-8 and SS-9 were also analyzed for semi-volatile organic compounds (SVOCs) via USEPA method SW8270D and polychlorinated biphenyls (PCBs) via USEPA method SW8082A in addition to the aforementioned constituents, as these compounds are commonly found in these areas of concern.

The analytical results from the soil samples were screened against the North Carolina Department of Environment and Natural Resources (NCDENR) soil to groundwater Maximum Soil Contaminant Concentrations (MSCC), and are presented in **Table 1**. The complete laboratory analytical report is included in **Attachment A**. A summary of the results of the soil sample analysis is listed below.

Exceedances of MSCC:

- **Chromium:** SS-1, SS-2, SS-4, and SS-6 through SS-9, at concentrations ranging from 8.71 milligrams per kilogram (mg/kg) to 601 mg/kg with the greatest concentration observed in SS-6 (MSCC – 5.4 mg/kg).

Detections above the reporting limit and below the MSCC:

- **SS-1:** Barium at 140 mg/kg (MSCC – 290 mg/kg), Cadmium at 2.96 mg/kg (MSCC – not available), and Lead at 1.37 mg/kg (MSCC – 270 mg/kg);
- **SS-2:** Barium at 31.3 mg/kg (MSCC – 290 mg/kg), Cadmium at 2.31 mg/kg (MSCC – not available), Mercury at 0.013 mg/kg (MSCC – not available) and Lead at 7.74 mg/kg (MSCC - 270 mg/kg);
- **SS-3:** Barium at 90.5 mg/kg (MSCC – 290 mg/kg), Cadmium at 0.346 mg/kg (MSCC – not available), Chromium at 3.45 mg/kg (MSCC – 5.4 mg/kg) and Lead at 0.737 mg/kg (MSCC – 270 mg/kg);

- **SS-4:** Barium at 95.2 mg/kg (MSCC – 290 mg/kg), Cadmium at 0.720 mg/kg (MSCC – not available), Mercury at 0.022 mg/kg (MSCC – not available) and Lead at 1.28 mg/kg (MSCC - 270 mg/kg);
- **SS-5:** Barium at 25.4 mg/kg (MSCC – 290 mg/kg), Cadmium at 0.846 mg/kg (MSCC – not available), Chromium at 5.23 mg/kg (MSCC – 5.4 mg/kg) and Lead at 3.83 mg/kg (MSCC – 270 mg/kg);
- **SS-6:** Barium at 288 mg/kg (MSCC – 290 mg/kg), Cadmium at 3.87 mg/kg (MSCC – not available), Mercury at 0.012 mg/kg (MSCC – not available) and Lead at 2.16 mg/kg (MSCC - 270 mg/kg);
- **SS-7:** Barium at 183 mg/kg (MSCC – 290 mg/kg) and Cadmium at 2.85 mg/kg (MSCC – not available);
- **SS-8:** Barium at 71.9 mg/kg (MSCC – 290 mg/kg) and Cadmium at 0.841 mg/kg (MSCC – not available); and
- **SS-9:** Barium at 111 mg/kg (MSCC – 290 mg/kg) and Cadmium at 0.580 mg/kg (MSCC – not available).

1.2 Groundwater Sampling and Analysis

On November 16 and 17, 2015, following the installation of the temporary wells GW-1, GW-2, GW-3 and GW-4 within soil borings SS-2, SS-4, SS-7 and SS-8, respectively, groundwater samples were collected from the middle of the screened interval at depths ranging from 17.5 feet bgs to 20 feet bgs. Groundwater samples were collected from each temporary well using a peristaltic pump and each well had dedicated polyethylene tubing. Each sample was placed in the proper bottleware and immediately placed in a cooler containing packaged ice.

The groundwater samples and associated chain-of-custody form were submitted to AWS for analysis of the site specific COCs including; BTEX, MTBE, and naphthalene via USEPA Method SW8260B, TPH-GRO and TPH-DRO via USEPA Method 8015C, and RCRA 8 metals via Method SW6010C and Method SW7470A. The groundwater analytical results were screened against the NCDENR 2L Groundwater (GW) Standards and are presented in **Table 2**. The complete analytical laboratory report is included in **Attachment A**. A summary of the groundwater analytical results is listed below.

Exceedances of 2L GW Standard:

- **GW-1:** Barium at 2.5 milligrams per liter (mg/L) (2L GW Standard – 0.7 mg/L), Cadmium at 0.0096 mg/L (2L GW Standard – 0.002 mg/L) and Chromium at 0.0284 mg/L (2L GW Standard – 0.01 mg/L);
- **GW-2:** Cadmium at 0.0066 mg/L (2L GW Standard – 0.002 mg/L) and Chromium at 0.0644 mg/L (2L GW Standard – 0.01 mg/L);
- **GW-3:** Arsenic at 0.0105 mg/L (2L GW Standard – 0.1 mg/L); and
- **GW-4:** Chromium at 0.0222 mg/L (2L GW Standard – 0.01 mg/L).

Detections above the reporting limit and below the 2L GW Standard:

- **GW-2:** Barium at 0.616 mg/L (2L GW Standard – 0.7 mg/L);
- **GW-3:** Barium at 0.121 mg/L (2L GW Standard – 0.7 mg/L); and
- **GW-4:** Barium at 0.313 mg/L (2L GW Standard – 0.7 mg/L).

2.0 SITE ASSESSMENT SUMMARY

The following is a summary of the analytical results collected during the Supplemental Phase 2 ESA:

- The analytical results indicate that target compounds in all soil samples were either not detected or detected below the MSCC, with the exception of chromium detected above the MSCC in several soil borings.
- The analytical results indicate that arsenic exceeded the 2L standard in GW-3, barium exceeded the 2L standard in GW-1, cadmium exceeded the 2L standard in GW-1 and GW-2 and chromium exceeded the 2L standard in GW-1, GW-2 and GW-4. All remaining target compounds were either not detected or were detected below the 2L GW standard.
- Groundwater at the Subject Property ranged from 12.05 feet bgs in GW-3 to 13.40 feet bgs in GW-1 during the investigation.

Please do not hesitate to contact me at (866) 222-7786 extension 4094 with any questions and/or comments.

Respectfully submitted,
GROUNDWATER & ENVIRONMENTAL SERVICES, INC.



Daniel Breckenridge
Project Manager

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Local Area Map
- Figure 3 – Site Map
- Figure 4 – Soil Boring Location Map

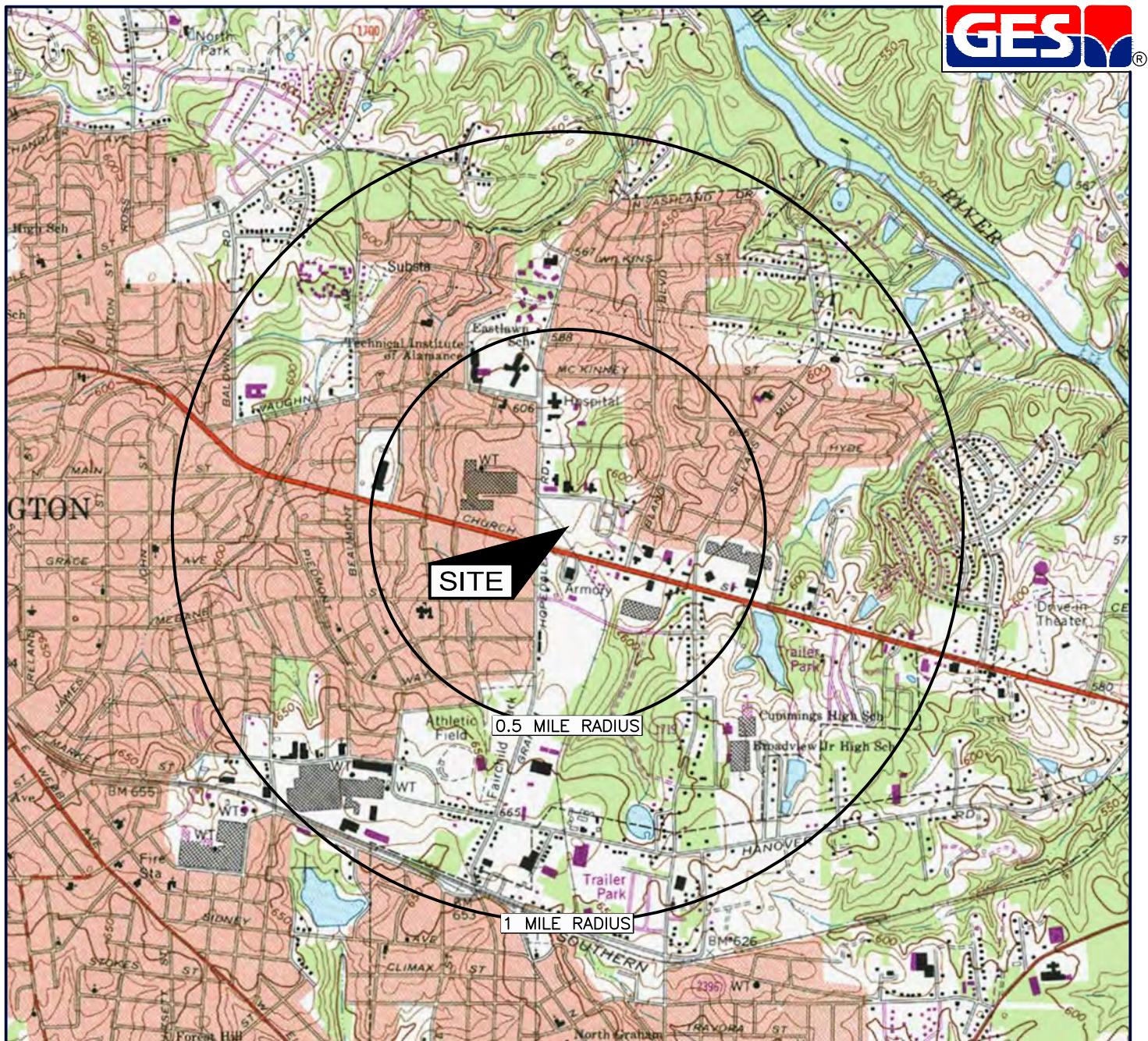
Tables:

- Table 1 – Soil Quality Data Summary
- Table 2 – Groundwater Quality Data Summary

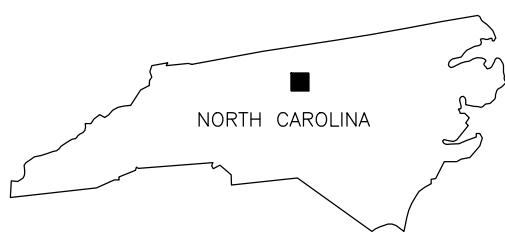
Attachments:

- Attachment A – Laboratory Analytical Report

FIGURES



SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1981
BURLINGTON, NORTH CAROLINA
CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

LAT. 036° 05' 48.36" N
LONG. 079° 24' 17.46" W
(APPROXIMATE SITE COORDINATES)



DRAFTED BY: W.A.W. (N.J.)	LOCAL AREA MAP	
CHECKED BY: N.B.	SHEETZ INCORPORATED	
REVIEWED BY: D.B.	INTERSECTION OF N GRAHAM HOPEDALE RD & N CHURCH STREET BURLINGTON, NORTH CAROLINA	
Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VIRGINIA 23227		
SCALE IN FEET		DATE
0 280		FIGURE
10-1-15		2



DRAFTED BY:
W.A.W.
(N.J.)

CHECKED BY:
N.B.

REVIEWED BY:
D.B.

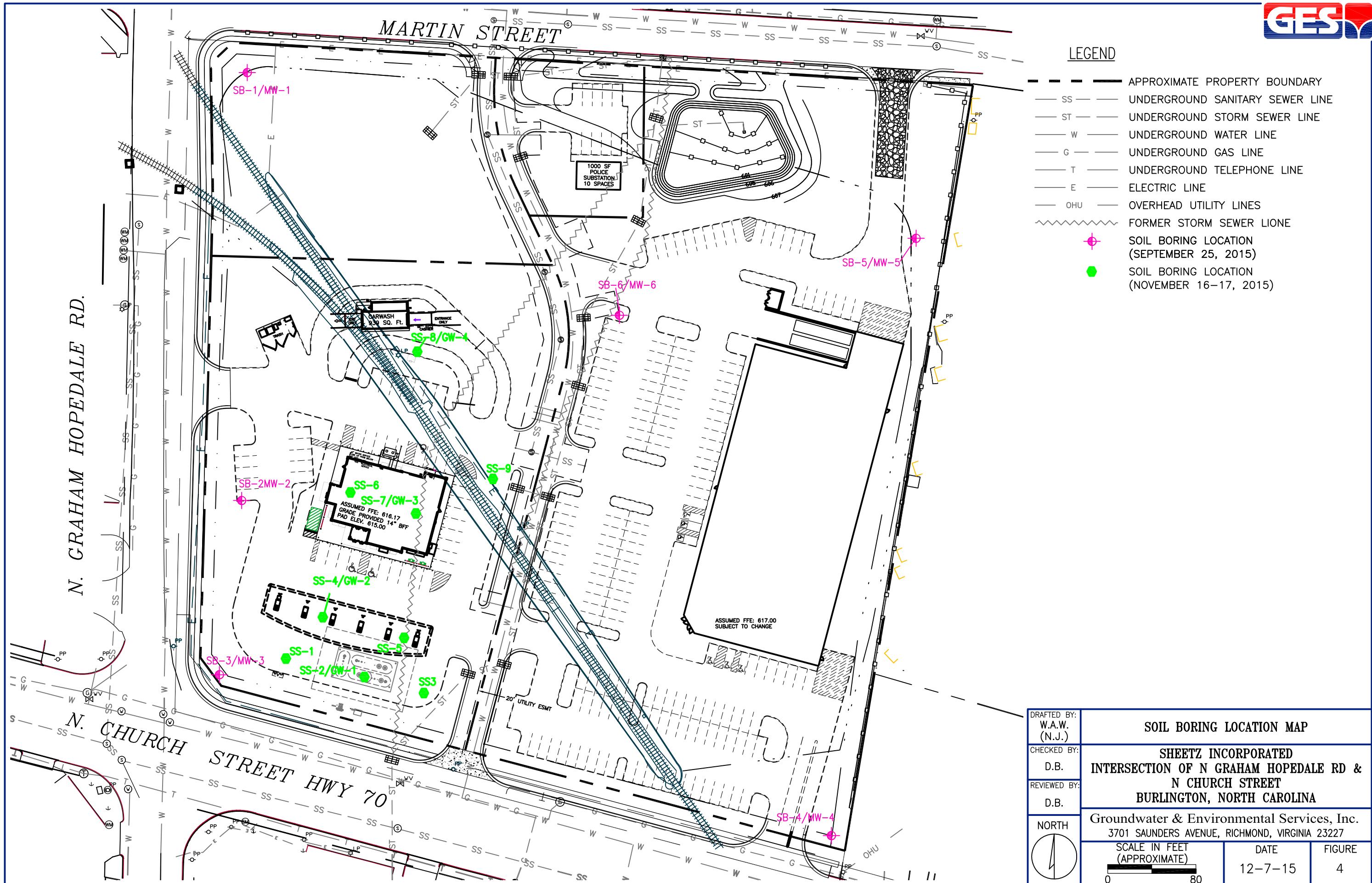
NORTH

SITE MAP
SHEETZ INCORPORATED
INTERSECTION OF N GRAHAM HOPEDALE RD &
N CHURCH STREET
BURLINGTON, NORTH CAROLINA

Groundwater & Environmental Services, Inc.
23 SOUTH 13TH STREET, SUITE 103, RICHMOND, VA 23219

SCALE IN FEET
(APPROXIMATE)
0 100

DATE
10-1-15 FIGURE
3



TABLES

Table 1

SOIL QUALITY DATA SUMMARY

Proposed Sheetz Location
 N Graham Hopedale Road and N Church Street
 Burlington, North Carolina

Sample ID	Units	Soil-to-GW MSCC	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9
Sample Depth (ft bgs)			14-17	14-17	14-17	12-15	11-13	11-13	15-17	15-17	11-13
Date Sampled			11/16/2015	11/16/2015	11/16/2015	11/16/2015	11/17/2015	11/17/2015	11/16/2015	11/16/2015	11/17/2015
Field Parameters											
PID	ppm	~	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Volatile Organic Compounds (VOCs)											
Methyl-t-butyl ether (MTBE)	mg/kg	0.091	ND								
Benzene	mg/kg	0.0056	ND								
Toluene	mg/kg	4	ND								
Ethylbenzene	mg/kg	5	ND								
Total Xylenes	mg/kg	5	ND								
Naphthalene	mg/kg	0.16	ND								
TPH-GRO											
GRO	mg/kg	~	ND								
TPH-DRO											
DRO	mg/kg	~	ND								
RCRA 8 Metals											
Silver	mg/kg	0.25	ND								
Arsenic	mg/kg	~	ND								
Barium	mg/kg	290	140	31.3	90.5	95.2	25.4	288	183	71.9	111
Cadmium	mg/kg	~	2.96	2.31	0.346	0.720	0.846	3.87	2.85	0.841	0.580
Chromium	mg/kg	5.4	26.0	19.3	3.45	21.8	5.23	601	8.71	56.9	9.64
Mercury	mg/kg	~	ND	0.013	ND	0.022	ND	0.012	ND	ND	ND
Lead	mg/kg	270	1.37	7.74	0.737	1.28	3.83	2.16	ND	ND	ND
Selenium	mg/kg	~	ND								
Semi-Volatile Organic Compounds (SVOCs)											
1,2,4,5-Tetrachlorobenzene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
1,2,4-Trichlorobenzene	ug/kg	2,600	-	-	-	-	-	-	-	ND	ND
1,2-Dichlorobenzene	ug/kg	230	-	-	-	-	-	-	-	ND	ND
1,2-Diphenylhydrazine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
1,3-Dichlorobenzene	ug/kg	7,600	-	-	-	-	-	-	-	ND	ND
1,4-Dichlorobenzene	ug/kg	99	-	-	-	-	-	-	-	ND	ND
1-Chloronaphthalene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
1-Naphthylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,3,4,6-Tetrachlorophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,4,5-Trichlorophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,4,6-Trichlorophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,4-Dichlorophenol	ug/kg	3.4	-	-	-	-	-	-	-	ND	ND
2,4-Dimethylphenol	ug/kg	640	-	-	-	-	-	-	-	ND	ND
2,4-Dinitrophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,4-Dinitrotoluene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,6-Dichlorophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2,6-Dinitrotoluene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2-Chloronaphthalene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2-Chlorophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2-Methylnaphthalene	ug/kg	3,600	-	-	-	-	-	-	-	ND	ND
2-Naphthylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2-Nitroaniline	ug/kg	~	-	-	-	-	-	-	-	ND	ND
2-Nitrophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
3,3'-Dichlorobenzidine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
3-Methylcholanthrene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
3-Nitroaniline	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4,6-Dinitro-2-methylphenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND

Table 1

SOIL QUALITY DATA SUMMARY

Proposed Sheetz Location
 N Graham Hopedale Road and N Church Street
 Burlington, North Carolina

Sample ID	Units	Soil-to-GW MSCC	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9
Sample Depth (ft bgs)			14-17	14-17	14-17	12-15	11-13	11-13	15-17	15-17	11-13
Date Sampled			11/16/2015	11/16/2015	11/16/2015	11/16/2015	11/17/2015	11/17/2015	11/16/2015	11/16/2015	11/17/2015
Semi-Volatile Organic Compounds (SVOCs)											
4-Aminobiphenyl	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4-Bromophenyl phenyl ether	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4-Chloroaniline	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4-Chlorophenyl phenyl ether	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4-Nitroaniline	ug/kg	~	-	-	-	-	-	-	-	ND	ND
4-Nitrophenol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
7,12-Dimethylbenz (a) anthracene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Acenaphthene	ug/kg	8,200	-	-	-	-	-	-	-	ND	ND
Acenaphthylene	ug/kg	11,000	-	-	-	-	-	-	-	ND	ND
Acetophenone	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Aniline	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Anthracene	ug/kg	940,000	-	-	-	-	-	-	-	ND	ND
Benzidine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Benzo (a) anthracene	ug/kg	350	-	-	-	-	-	-	-	ND	ND
Benzo (a) pyrene	ug/kg	96	-	-	-	-	-	-	-	ND	ND
Benzo (b) fluoranthene	ug/kg	12,000	-	-	-	-	-	-	-	ND	ND
Benzo (g,h,i) perylene	ug/kg	6,400,000	-	-	-	-	-	-	-	ND	ND
Benzo (k) fluoranthene	ug/kg	12,000	-	-	-	-	-	-	-	ND	ND
Benzoic acid	ug/kg	120,000	-	-	-	-	-	-	-	ND	ND
Benzyl alcohol	ug/kg	2,000	-	-	-	-	-	-	-	ND	ND
bis (2-Chloroethoxy) methane	ug/kg	~	-	-	-	-	-	-	-	ND	ND
bis (2-Chloroethyl) ether	ug/kg	0.16	-	-	-	-	-	-	-	ND	ND
bis (2-Chloroisopropyl) ether	ug/kg	~	-	-	-	-	-	-	-	ND	ND
bis (2-Ethylhexyl) phthalate	ug/kg	6,600	-	-	-	-	-	-	-	ND	ND
Butyl benzyl phthalate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Chrysene	ug/kg	39,000	-	-	-	-	-	-	-	ND	ND
Dibenz (a,h) anthracene	ug/kg	170	-	-	-	-	-	-	-	ND	ND
Dibenz (a,j) acridine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Dibenzofuran	ug/kg	4,700	-	-	-	-	-	-	-	ND	ND
Diethyl phthalate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Dimethyl phthalate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Di-n-butyl phthalate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Di-n-octyl phthalate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Diphenylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Ethyl methanesulfonate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Fluoranthene	ug/kg	290,000	-	-	-	-	-	-	-	ND	ND
Fluorene	ug/kg	47,000	-	-	-	-	-	-	-	ND	ND
Hexachlorobenzene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Hexachlorobutadiene	ug/kg	230	-	-	-	-	-	-	-	ND	ND
Hexachlorocyclopentadiene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Hexachloroethane	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Indeno (1,2,3-cd) pyrene	ug/kg	3,400	-	-	-	-	-	-	-	ND	ND
Isophorone	ug/kg	~	-	-	-	-	-	-	-	ND	ND
m+p-Cresols	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Methyl methanesulfonate	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Naphthalene	ug/kg	160	-	-	-	-	-	-	-	ND	ND
Nitrobenzene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
n-Nitrosodimethylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
n-Nitrosodi-n-butylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND

Table 1

SOIL QUALITY DATA SUMMARY

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 Burlington, North Carolina

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Date Sampled			11/16/2015	11/16/2015	11/16/2015	11/16/2015	11/17/2015	11/17/2015	11/16/2015	11/16/2015	11/17/2015
Semi-Volatile Organic Compounds (SVOCs)											
n-Nitrosodi-n-propylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
n-Nitrosodiphenylamine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
n-Nitrosopiperidine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
o+m+p-Cresols	ug/kg	~	-	-	-	-	-	-	-	ND	ND
o-Cresol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
p-(Dimethylamino) azobenzene	ug/kg	~	-	-	-	-	-	-	-	ND	ND
p-Chloro-m-cresol	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Pentachloronitrobenzene (quintozene)	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Pentachlorophenol	ug/kg	6.5	-	-	-	-	-	-	-	ND	ND
Phenacetin	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Phenanthrene	ug/kg	56,000	-	-	-	-	-	-	-	ND	ND
Phenol	ug/kg	170	-	-	-	-	-	-	-	ND	ND
Promamide	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Pyrene	ug/kg	270,000	-	-	-	-	-	-	-	ND	ND
Pyridine	ug/kg	~	-	-	-	-	-	-	-	ND	ND
Organochlorine Pesticides and PCBs											
PCB as Aroclor 1016	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1221	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1232	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1242	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1248	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1254	mg/kg	~	-	-	-	-	-	-	-	ND	ND
PCB as Aroclor 1260	mg/kg	~	-	-	-	-	-	-	-	ND	ND

Notes:

MSCC - Maximum Soil Contaminant Concentration (from North Carolina Department of Environment and Natural Resources)

~ - No MSCC available

mg/kg - milligrams per kilograms

ND - Non Detect

ft bgs - feet below ground surface

PID - Photoionization Detector

ppm - Parts per million

TPH-GRO - Total Petroleum Hydrocarbons Gasoline Range Organics

TPH-DRO - Total Petroleum Hydrocarbons Diesel Range Organics

PCB - Polychlorinated Biphenyls

Table 2

GROUNDWATER QUALITY DATA SUMMARY

Proposed Sheetz Location
 N Graham Hopedale Road and N Church Street
 Burlington, North Carolina

Sample ID	Units	2L Groundwater Standard	GW-1	GW-2	GW-3	GW-4
Date Sampled			11/17/2015	11/17/2015	11/17/2015	11/17/2015
Depth to Water (ft bgs)			13.40	13.25	12.05	13.15
Volatile Organic Compounds (VOCs)						
Methyl-t-butyl ether (MTBE)	ug/L	20	ND	ND	ND	ND
Benzene	ug/L	1	ND	ND	ND	ND
Toluene	ug/L	600	ND	ND	ND	ND
Ethylbenzene	ug/L	600	ND	ND	ND	ND
Total Xylenes	ug/L	500	ND	ND	ND	ND
Naphthalene	ug/L	6	ND	ND	ND	ND
TPH-GRO						
GRO	mg/L	~	ND	ND	ND	ND
TPH-DRO						
DRO	mg/L	~	ND	ND	ND	ND
RCRA 8 Metals						
Silver	mg/L	0.020	ND	ND	ND	ND
Arsenic	mg/L	0.010	ND	ND	0.0105	ND
Barium	mg/L	0.70	2.50	0.616	0.121	0.313
Cadmium	mg/L	0.0020	0.0096	0.0066	ND	ND
Chromium	mg/L	0.010	0.0284	0.0644	ND	0.0222
Mercury	mg/L	0.0010	ND	ND	ND	ND
Lead	mg/L	0.015	ND	ND	ND	ND
Selenium	mg/L	0.020	ND	ND	ND	ND

Notes:

~ - NCDENR 2L Groundwater Standard not available

ug/L - micrograms per Liter

mg/L - milligrams per Liter

ND-Non Detect

DTW - Depth to water

ft bgs - feet below ground surface

TPH-GRO Total Petroleum Hydrocarbons Gasoline Range Organics

TPH-DRO Total Petroleum Hydrocarbons Diesel Range Organics



ATTACHMENT A

Laboratory Analytical Report



1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Laboratory Order ID 15K0390

Client Name:	Groundwater Environmental Services, Inc.-R 3701 Saunders Ave. Richmond, VA 23227	Date Received:	November 17, 2015 16:15
		Date Issued:	November 24, 2015 17:24
Submitted To:	Daniel Breckenridge	Project Number:	[none]
		Purchase Order:	

Client Site I.D.: Sheetz - Burlington Phase II Follow-up

Enclosed are the results of analyses for samples received by the laboratory on 11/17/2015 16:15. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

A handwritten signature in black ink that reads "Ted Soyars".

Ted Soyars
Laboratory Manager

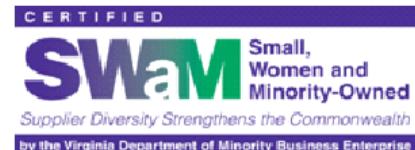
End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 15K0390

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1 (14-17)	15K0390-01	Soil	11/16/2015 12:45	11/17/2015 16:15
SS-2 (14-17)	15K0390-02	Soil	11/16/2015 13:30	11/17/2015 16:15
SS-3 (14-17)	15K0390-03	Soil	11/16/2015 14:30	11/17/2015 16:15
SS-4 (12-15)	15K0390-04	Soil	11/16/2015 15:20	11/17/2015 16:15
SS-7 (15-17)	15K0390-05	Soil	11/16/2015 15:55	11/17/2015 16:15
SS-8 (15-17)	15K0390-06	Soil	11/16/2015 16:30	11/17/2015 16:15
GW-1	15K0390-07	Ground Water	11/17/2015 07:45	11/17/2015 16:15
GW-2	15K0390-08	Ground Water	11/17/2015 08:15	11/17/2015 16:15
GW-3	15K0390-09	Ground Water	11/17/2015 08:45	11/17/2015 16:15
GW-4	15K0390-10	Ground Water	11/17/2015 09:15	11/17/2015 16:15
SS-9 (11-13)	15K0390-11	Soil	11/17/2015 09:30	11/17/2015 16:15
SS-6 (11-13)	15K0390-12	Soil	11/17/2015 10:10	11/17/2015 16:15
SS-5 (11-13)	15K0390-13	Soil	11/17/2015 10:45	11/17/2015 16:15
Trip Blank	15K0390-14	Non-Potable Water	11/10/2015 09:20	11/17/2015 16:15

Soil results have been calculated based on dry weight.



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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results		Laboratory Sample ID: 15K0390-01								
Sample I.D.	SS-1 (14-17)	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods										
Silver	01	SW6010C		<0.632 mg/kg dry		0.632	1	11/19/15 10:20	11/20/15 15:04	KEW
Arsenic	01	SW6010C		<1.26 mg/kg dry		1.26	1	11/19/15 10:20	11/20/15 15:04	KEW
Barium	01	SW6010C		140 mg/kg dry		0.632	1	11/19/15 10:20	11/20/15 15:04	KEW
Cadmium	01	SW6010C		2.96 mg/kg dry		0.253	1	11/19/15 10:20	11/20/15 15:04	KEW
Chromium	01	SW6010C		26.0 mg/kg dry		0.632	1	11/19/15 10:20	11/20/15 15:04	KEW
Mercury	01	SW7471B		<0.010 mg/kg dry		0.010	1	11/23/15 15:00	11/24/15 11:04	MWL
Lead	01	SW6010C		1.37 mg/kg dry		0.632	1	11/19/15 10:20	11/20/15 15:04	KEW
Selenium	01	SW6010C		<3.16 mg/kg dry		3.16	1	11/19/15 10:20	11/20/15 15:04	KEW
Volatile Hydrocarbons by GC										
TPH-Volatiles (GRO)	01	SW8015C		<0.10 mg/kg dry		0.10	1	11/19/15 12:30	11/19/15 12:30	CL
Volatile Organic Compounds by GCMS										
Benzene	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
Ethylbenzene	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
m+p-Xylenes	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
Methyl-t-butyl ether (MTBE)	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
Naphthalene	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
o-Xylene	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
Toluene	01	SW8260B		<6.47 ug/kg dry		6.47	1	11/19/15 12:50	11/19/15 12:50	MKD
Xylenes, Total	01	SW8260B		<19.4 ug/kg dry		19.4	1	11/19/15 12:50	11/19/15 12:50	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	01	SW8260B		106 %		80-120		11/19/15 12:50	11/19/15 12:50	MKD
<i>Surr: 4-Bromofluorobenzene</i>	01	SW8260B		94.5 %		85-120		11/19/15 12:50	11/19/15 12:50	MKD
<i>Surr: Dibromofluoromethane</i>	01	SW8260B		98.7 %		78-119		11/19/15 12:50	11/19/15 12:50	MKD
<i>Surr: Toluene-d8</i>	01	SW8260B		99.2 %		85-115		11/19/15 12:50	11/19/15 12:50	MKD



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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-1 (14-17) Laboratory Sample ID: 15K0390-01

Date/Time Sampled: 11/16/2015 12:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01	SW8015C	<12.8 mg/kg dry		12.8	1	11/20/15 11:13	11/23/15 13:18	JHV
<i>Sur: Pentacosane</i>	01	SW8015C	56.4 %		40-160		11/20/15 11:13	11/23/15 13:18	JHV
Wet Chemistry Analysis									
Percent Solids	01	SM18 2540G	77.3 %		0.10	1	11/19/15 15:12	11/19/15 15:12	RCV

Analytical Results

Sample I.D. SS-2 (14-17) Laboratory Sample ID: 15K0390-02

Date/Time Sampled: 11/16/2015 13:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	02	SW6010C	<0.648 mg/kg dry		0.648	1	11/19/15 10:20	11/24/15 15:21	KEW
Arsenic	02	SW6010C	<1.30 mg/kg dry		1.30	1	11/19/15 10:20	11/24/15 15:21	KEW
Barium	02	SW6010C	31.3 mg/kg dry		0.648	1	11/19/15 10:20	11/24/15 15:21	KEW
Cadmium	02	SW6010C	2.31 mg/kg dry		0.259	1	11/19/15 10:20	11/24/15 15:21	KEW
Chromium	02	SW6010C	19.3 mg/kg dry		0.648	1	11/19/15 10:20	11/24/15 15:21	KEW
Mercury	02	SW7471B	0.013 mg/kg dry		0.010	1	11/23/15 15:00	11/24/15 11:11	MWL
Lead	02	SW6010C	7.74 mg/kg dry		0.648	1	11/19/15 10:20	11/24/15 15:21	KEW
Selenium	02	SW6010C	<3.24 mg/kg dry		3.24	1	11/19/15 10:20	11/24/15 15:21	KEW
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	02RE1	SW8015C	<5.10 mg/kg dry		5.10	50	11/19/15 17:21	11/19/15 17:21	CL
Volatile Organic Compounds by GCMS									
Benzene	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD
Ethylbenzene	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-2 (14-17) Laboratory Sample ID: 15K0390-02

Date/Time Sampled: 11/16/2015 13:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
m+p-Xylenes	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD
Methyl-t-butyl ether (MTBE)	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD
Naphthalene	02RE1	SW8260B	<7.02 ug/kg dry		7.02	1	11/20/15 13:57	11/20/15 13:57	MKD
o-Xylene	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD
Toluene	02RE1	SW8260B	<351 ug/kg dry		351	50	11/20/15 13:57	11/20/15 13:57	MKD
Xylenes, Total	02RE1	SW8260B	<21.1 ug/kg dry		21.1	1	11/20/15 13:57	11/20/15 13:57	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	02RE1	SW8260B	106 %		80-120		11/20/15 13:57	11/20/15 13:57	MKD
<i>Surr: 4-Bromofluorobenzene</i>	02RE1	SW8260B	86.9 %		85-120		11/20/15 13:57	11/20/15 13:57	MKD
<i>Surr: Dibromofluoromethane</i>	02RE1	SW8260B	97.8 %		78-119		11/20/15 13:57	11/20/15 13:57	MKD
<i>Surr: Toluene-d8</i>	02RE1	SW8260B	101 %		85-115		11/20/15 13:57	11/20/15 13:57	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	02	SW8015C	<13.8 mg/kg dry		13.8	1	11/20/15 11:13	11/23/15 13:45	JHV
<i>Surr: Pentacosane</i>	02	SW8015C	71.6 %		40-160		11/20/15 11:13	11/23/15 13:45	JHV
Wet Chemistry Analysis									
Percent Solids	02	SM18 2540G	71.2 %		0.10	1	11/19/15 15:14	11/19/15 15:14	RCV

Analytical Results

Sample I.D. SS-3 (14-17) Laboratory Sample ID: 15K0390-03

Date/Time Sampled: 11/16/2015 14:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	03	SW6010C	<0.609 mg/kg dry		0.609	1	11/19/15 10:20	11/24/15 15:40	KEW
Arsenic	03	SW6010C	<1.22 mg/kg dry		1.22	1	11/19/15 10:20	11/24/15 15:40	KEW



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-03								
Date/Time Sampled: 11/16/2015 14:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Barium	03	SW6010C	90.5 mg/kg dry		0.609	1	11/19/15 10:20	11/24/15 15:40	KEW
Cadmium	03	SW6010C	0.346 mg/kg dry		0.244	1	11/19/15 10:20	11/24/15 15:40	KEW
Chromium	03	SW6010C	3.45 mg/kg dry		0.609	1	11/19/15 10:20	11/24/15 15:40	KEW
Mercury	03	SW7471B	<0.010 mg/kg dry		0.010	1	11/23/15 15:00	11/24/15 11:14	MWL
Lead	03	SW6010C	0.737 mg/kg dry		0.609	1	11/19/15 10:20	11/24/15 15:40	KEW
Selenium	03	SW6010C	<3.05 mg/kg dry		3.05	1	11/19/15 10:20	11/24/15 15:40	KEW
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	03	SW8015C	<0.10 mg/kg dry		0.10	1	11/19/15 13:14	11/19/15 13:14	CL
Volatile Organic Compounds by GCMS									
Benzene	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
Ethylbenzene	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
m+p-Xylenes	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
Methyl-t-butyl ether (MTBE)	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
Naphthalene	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
o-Xylene	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
Toluene	03	SW8260B	<6.58 ug/kg dry		6.58	1	11/19/15 13:36	11/19/15 13:36	MKD
Xylenes, Total	03	SW8260B	<19.7 ug/kg dry		19.7	1	11/19/15 13:36	11/19/15 13:36	MKD
Surr: 1,2-Dichloroethane-d4	03	SW8260B	112 %		80-120		11/19/15 13:36	11/19/15 13:36	MKD
Surr: 4-Bromofluorobenzene	03	SW8260B	92.5 %		85-120		11/19/15 13:36	11/19/15 13:36	MKD
Surr: Dibromofluoromethane	03	SW8260B	102 %		78-119		11/19/15 13:36	11/19/15 13:36	MKD
Surr: Toluene-d8	03	SW8260B	103 %		85-115		11/19/15 13:36	11/19/15 13:36	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	03	SW8015C	<13.1 mg/kg dry		13.1	1	11/20/15 11:13	11/23/15 14:11	JHV
Surr: Pentacosane	03	SW8015C	70.5 %		40-160		11/20/15 11:13	11/23/15 14:11	JHV



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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-3 (14-17) Laboratory Sample ID: 15K0390-03

Date/Time Sampled: 11/16/2015 14:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Wet Chemistry Analysis

Percent Solids	03	SM18 2540G	76.0 %		0.10	1	11/19/15 15:16	11/19/15 15:16	RCV
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Analytical Results

Sample I.D. SS-4 (12-15) Laboratory Sample ID: 15K0390-04

Date/Time Sampled: 11/16/2015 15:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	04	SW6010C	<0.638 mg/kg dry		0.638	1	11/19/15 10:20	11/24/15 15:43	KEW
Arsenic	04	SW6010C	<1.28 mg/kg dry		1.28	1	11/19/15 10:20	11/24/15 15:43	KEW
Barium	04	SW6010C	95.2 mg/kg dry		0.638	1	11/19/15 10:20	11/24/15 15:43	KEW
Cadmium	04	SW6010C	0.720 mg/kg dry		0.255	1	11/19/15 10:20	11/24/15 15:43	KEW
Chromium	04	SW6010C	21.8 mg/kg dry		0.638	1	11/19/15 10:20	11/24/15 15:43	KEW
Mercury	04	SW7471B	0.022 mg/kg dry		0.010	1	11/23/15 15:00	11/24/15 11:16	MWL
Lead	04	SW6010C	1.28 mg/kg dry		0.638	1	11/19/15 10:20	11/24/15 15:43	KEW
Selenium	04	SW6010C	<3.19 mg/kg dry		3.19	1	11/19/15 10:20	11/24/15 15:43	KEW

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	04	SW8015C	<0.10 mg/kg dry		0.10	1	11/19/15 13:37	11/19/15 13:37	CL
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Volatile Organic Compounds by GCMS

Benzene	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
Ethylbenzene	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
m+p-Xylenes	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
Methyl-t-butyl ether (MTBE)	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
Naphthalene	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD



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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-4 (12-15) Laboratory Sample ID: 15K0390-04

Date/Time Sampled: 11/16/2015 15:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
o-Xylene	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
Toluene	04	SW8260B	<6.40 ug/kg dry		6.40	1	11/19/15 14:00	11/19/15 14:00	MKD
Xylenes, Total	04	SW8260B	<19.2 ug/kg dry		19.2	1	11/19/15 14:00	11/19/15 14:00	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	04	SW8260B	105 %		80-120		11/19/15 14:00	11/19/15 14:00	MKD
<i>Surr: 4-Bromofluorobenzene</i>	04	SW8260B	95.1 %		85-120		11/19/15 14:00	11/19/15 14:00	MKD
<i>Surr: Dibromofluoromethane</i>	04	SW8260B	101 %		78-119		11/19/15 14:00	11/19/15 14:00	MKD
<i>Surr: Toluene-d8</i>	04	SW8260B	100 %		85-115		11/19/15 14:00	11/19/15 14:00	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	04	SW8015C	<12.0 mg/kg dry		12.0	1	11/20/15 11:13	11/23/15 14:38	JHV
<i>Surr: Pentacosane</i>	04	SW8015C	69.3 %		40-160		11/20/15 11:13	11/23/15 14:38	JHV
Wet Chemistry Analysis									
Percent Solids	04	SM18 2540G	78.2 %		0.10	1	11/19/15 15:18	11/19/15 15:18	RCV

Analytical Results

Sample I.D. SS-7 (15-17) Laboratory Sample ID: 15K0390-05

Date/Time Sampled: 11/16/2015 15:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	05	SW6010C	<0.610 mg/kg dry		0.610	1	11/19/15 10:20	11/24/15 15:48	KEW
Arsenic	05	SW6010C	<1.22 mg/kg dry		1.22	1	11/19/15 10:20	11/24/15 15:48	KEW
Barium	05	SW6010C	183 mg/kg dry		0.610	1	11/19/15 10:20	11/24/15 15:48	KEW
Cadmium	05	SW6010C	2.85 mg/kg dry		0.244	1	11/19/15 10:20	11/24/15 15:48	KEW
Chromium	05	SW6010C	8.71 mg/kg dry		0.610	1	11/19/15 10:20	11/24/15 15:48	KEW



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-7 (15-17) Laboratory Sample ID: 15K0390-05

Date/Time Sampled: 11/16/2015 15:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Mercury	05	SW7471B	<0.009 mg/kg dry		0.009	1	11/23/15 15:00	11/24/15 11:18	MWL
Lead	05	SW6010C	<0.610 mg/kg dry		0.610	1	11/19/15 10:20	11/24/15 15:48	KEW
Selenium	05	SW6010C	<3.05 mg/kg dry		3.05	1	11/19/15 10:20	11/24/15 15:48	KEW
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	05	SW8015C	<4.30 mg/kg dry		4.30	50	11/19/15 17:43	11/19/15 17:43	CL
Volatile Organic Compounds by GCMS									
Benzene	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
Ethylbenzene	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
m+p-Xylenes	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
Methyl-t-butyl ether (MTBE)	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
Naphthalene	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
o-Xylene	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
Toluene	05	SW8260B	<6.19 ug/kg dry		6.19	1	11/19/15 14:24	11/19/15 14:24	MKD
Xylenes, Total	05	SW8260B	<18.6 ug/kg dry		18.6	1	11/19/15 14:24	11/19/15 14:24	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	05	SW8260B	107 %		80-120		11/19/15 14:24	11/19/15 14:24	MKD
<i>Surr: 4-Bromofluorobenzene</i>	05	SW8260B	93.8 %		85-120		11/19/15 14:24	11/19/15 14:24	MKD
<i>Surr: Dibromofluoromethane</i>	05	SW8260B	100 %		78-119		11/19/15 14:24	11/19/15 14:24	MKD
<i>Surr: Toluene-d8</i>	05	SW8260B	102 %		85-115		11/19/15 14:24	11/19/15 14:24	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	05	SW8015C	<12.4 mg/kg dry		12.4	1	11/20/15 11:13	11/23/15 15:04	JHV
<i>Surr: Pentacosane</i>	05	SW8015C	65.9 %		40-160		11/20/15 11:13	11/23/15 15:04	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-7 (15-17) Laboratory Sample ID: 15K0390-05

Date/Time Sampled: 11/16/2015 15:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Wet Chemistry Analysis

Percent Solids	05	SM18 2540G	80.8 %		0.10	1	11/19/15 15:20	11/19/15 15:20	RCV
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Analytical Results

Sample I.D. SS-8 (15-17) Laboratory Sample ID: 15K0390-06

Date/Time Sampled: 11/16/2015 16:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	06	SW6010C	<0.568 mg/kg dry		0.568	1	11/19/15 10:20	11/24/15 16:08	KEW
Arsenic	06	SW6010C	<1.14 mg/kg dry		1.14	1	11/19/15 10:20	11/24/15 16:08	KEW
Barium	06	SW6010C	71.9 mg/kg dry		0.568	1	11/19/15 10:20	11/24/15 16:08	KEW
Cadmium	06	SW6010C	0.841 mg/kg dry		0.227	1	11/19/15 10:20	11/24/15 16:08	KEW
Chromium	06	SW6010C	56.9 mg/kg dry		0.568	1	11/19/15 10:20	11/24/15 16:08	KEW
Mercury	06	SW7471B	<0.008 mg/kg dry		0.008	1	11/23/15 15:00	11/24/15 11:25	MWL
Lead	06	SW6010C	<0.568 mg/kg dry		0.568	1	11/19/15 10:20	11/24/15 16:08	KEW
Selenium	06	SW6010C	<2.84 mg/kg dry		2.84	1	11/19/15 10:20	11/24/15 16:08	KEW

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	06	SW8015C	<0.10 mg/kg dry		0.10	1	11/19/15 13:59	11/19/15 13:59	CL
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Volatile Organic Compounds by GCMS

Benzene	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
Ethylbenzene	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
m+p-Xylenes	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
Methyl-t-butyl ether (MTBE)	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
Naphthalene	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	SS-8 (15-17)		Laboratory Sample ID: 15K0390-06						
Date/Time Sampled: 11/16/2015 16:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
o-Xylene	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
Toluene	06	SW8260B	<5.85 ug/kg dry		5.85	1	11/19/15 14:47	11/19/15 14:47	MKD
Xylenes, Total	06	SW8260B	<17.6 ug/kg dry		17.6	1	11/19/15 14:47	11/19/15 14:47	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	06	SW8260B	113 %		80-120		11/19/15 14:47	11/19/15 14:47	MKD
<i>Surr: 4-Bromofluorobenzene</i>	06	SW8260B	87.0 %		85-120		11/19/15 14:47	11/19/15 14:47	MKD
<i>Surr: Dibromofluoromethane</i>	06	SW8260B	98.1 %		78-119		11/19/15 14:47	11/19/15 14:47	MKD
<i>Surr: Toluene-d8</i>	06	SW8260B	101 %		85-115		11/19/15 14:47	11/19/15 14:47	MKD
Semivolatile Organic Compounds by GCMS									
1,2,4,5-Tetrachlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1,2,4-Trichlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1,2-Dichlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1,2-Diphenylhydrazine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1,3-Dichlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1,4-Dichlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1-Chloronaphthalene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
1-Naphthylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,3,4,6-Tetrachlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4,5-Trichlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4,6-Trichlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4-Dichlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4-Dimethylphenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4-Dinitrophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,4-Dinitrotoluene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,6-Dichlorophenol	06RE1	SW8270D	<390 ug/kg dry	C	390	4	11/23/15 10:16	11/23/15 17:25	JHV
2,6-Dinitrotoluene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2-Chloronaphthalene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-8 (15-17) Laboratory Sample ID: 15K0390-06

Date/Time Sampled: 11/16/2015 16:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2-Methylnaphthalene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2-Naphthylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2-Nitroaniline	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
2-Nitrophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
3,3'-Dichlorobenzidine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
3-Methylcholanthrene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
3-Nitroaniline	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4,6-Dinitro-2-methylphenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Aminobiphenyl	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Bromophenyl phenyl ether	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Chloroaniline	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Chlorophenyl phenyl ether	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Nitroaniline	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
4-Nitrophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
7,12-Dimethylbenz (a) anthracene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Acenaphthene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Acenaphthylene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Acetophenone	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Aniline	06RE1	SW8270D	<390 ug/kg dry	C	390	4	11/23/15 10:16	11/23/15 17:25	JHV
Anthracene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzidine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzo (a) anthracene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzo (a) pyrene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzo (b) fluoranthene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzo (g,h,i) perylene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-06								
Date/Time Sampled:	11/16/2015 16:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (k) fluoranthene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzoic acid	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Benzyl alcohol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
bis (2-Chloroethoxy) methane	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
bis (2-Chloroethyl) ether	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
bis (2-Chloroisopropyl) ether	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
bis (2-Ethylhexyl) phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Butyl benzyl phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Chrysene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Dibenz (a,h) anthracene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Dibenz (a,j) acridine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Dibenzofuran	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Diethyl phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Dimethyl phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Di-n-butyl phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Di-n-octyl phthalate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Diphenylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Ethyl methanesulfonate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Fluoranthene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Fluorene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Hexachlorobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Hexachlorobutadiene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Hexachlorocyclopentadiene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Hexachloroethane	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Indeno (1,2,3-cd) pyrene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Isophorone	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-06								
Date/Time Sampled:	11/16/2015 16:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
m+p-Cresols	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Methyl methanesulfonate	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Naphthalene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Nitrobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
n-Nitrosodimethylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
n-Nitrosodi-n-butylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
n-Nitrosodi-n-propylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
n-Nitrosodiphenylamine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
n-Nitrosopiperidine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
o+m+p-Cresols	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
o-Cresol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
p-(Dimethylamino)azobenzene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
p-Chloro-m-cresol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Pentachloronitrobenzene (quintozone)	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Pentachlorophenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Phenacetin	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Phenanthrene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Phenol	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Pronamide	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Pyrene	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Pyridine	06RE1	SW8270D	<390 ug/kg dry		390	4	11/23/15 10:16	11/23/15 17:25	JHV
Surr: 2,4,6-Tribromophenol	06RE1	SW8270D	44.9 %		35-125		11/23/15 10:16	11/23/15 17:25	JHV
Surr: 2-Fluorobiphenyl	06RE1	SW8270D	41.5 %	DS	45-105		11/23/15 10:16	11/23/15 17:25	JHV
Surr: 2-Fluorophenol	06RE1	SW8270D	55.2 %		35-105		11/23/15 10:16	11/23/15 17:25	JHV
Surr: Nitrobenzene-d5	06RE1	SW8270D	56.8 %		35-100		11/23/15 10:16	11/23/15 17:25	JHV



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-8 (15-17) Laboratory Sample ID: 15K0390-06

Date/Time Sampled: 11/16/2015 16:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Surr: Phenol-d5	06RE1	SW8270D	54.4 %		40-100		11/23/15 10:16	11/23/15 17:25	JHV
Surr: p-Terphenyl-d14	06RE1	SW8270D	70.4 %		30-125		11/23/15 10:16	11/23/15 17:25	JHV
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	06	SW8015C	<11.5 mg/kg dry		11.5	1	11/20/15 11:13	11/23/15 15:31	JHV
Surr: Pentacosane	06	SW8015C	61.2 %		40-160		11/20/15 11:13	11/23/15 15:31	JHV
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1221	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1232	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1242	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1248	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1254	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
PCB as Aroclor 1260	06	SW8082A	<0.109 mg/kg dry		0.109	1	11/23/15 12:07	11/24/15 01:57	SKS
Surr: DCB	06	SW8082A	70.0 %		30-105		11/23/15 12:07	11/24/15 01:57	SKS
Surr: TCMX	06	SW8082A	95.0 %		30-105		11/23/15 12:07	11/24/15 01:57	SKS
Wet Chemistry Analysis									
Percent Solids	06	SM18 2540G	85.4 %		0.10	1	11/19/15 15:22	11/19/15 15:22	RCV

Analytical Results

Sample I.D. GW-1 Laboratory Sample ID: 15K0390-07

Date/Time Sampled: 11/17/2015 07:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									



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Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results		Laboratory Sample ID: 15K0390-07								
Sample I.D.	GW-1	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods										
Silver	07	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 18:56	KEW	
Arsenic	07	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 18:56	KEW	
Barium	07	SW6010C	2.50 mg/L		0.0100	1	11/19/15 15:00	11/23/15 18:56	KEW	
Cadmium	07	SW6010C	0.0096 mg/L		0.0050	1	11/19/15 15:00	11/23/15 18:56	KEW	
Chromium	07	SW6010C	0.0284 mg/L		0.0100	1	11/19/15 15:00	11/23/15 18:56	KEW	
Mercury	07	SW7470A	<0.00020 mg/L		0.00020	1	11/20/15 09:30	11/20/15 14:50	MWL	
Lead	07	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 18:56	KEW	
Selenium	07	SW6010C	<0.0500 mg/L		0.0500	1	11/19/15 15:00	11/23/15 18:56	KEW	
Volatile Hydrocarbons by GC										
Cl										
TPH-Volatiles (GRO)	07	SW8015C	<0.10 mg/L		0.10	1	11/19/15 15:36	11/19/15 15:36	CL	
Volatile Organic Compounds by GCMS										
Benzene	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
Ethylbenzene	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
m+p-Xylenes	07	SW8260B	<2.00 ug/L		2.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
Methyl-t-butyl ether (MTBE)	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
Naphthalene	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
o-Xylene	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
Toluene	07	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
Xylenes, Total	07	SW8260B	<3.00 ug/L		3.00	1	11/20/15 12:23	11/20/15 12:23	MKD	
<i>Surr: 1,2-Dichloroethane-d4</i>	07	SW8260B	112 %		70-120		11/20/15 12:23	11/20/15 12:23	MKD	
<i>Surr: 4-Bromofluorobenzene</i>	07	SW8260B	89.0 %		75-120		11/20/15 12:23	11/20/15 12:23	MKD	
<i>Surr: Dibromofluoromethane</i>	07	SW8260B	102 %		80-119		11/20/15 12:23	11/20/15 12:23	MKD	
<i>Surr: Toluene-d8</i>	07	SW8260B	102 %		85-120		11/20/15 12:23	11/20/15 12:23	MKD	



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Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. GW-1 Laboratory Sample ID: 15K0390-07

Date/Time Sampled: 11/17/2015 07:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	07	SW8015C	<0.50 mg/L		0.50	1	11/23/15 14:30	11/23/15 22:19	JHV
Surr: Pentacosane	07	SW8015C	87.7 %		40-160		11/23/15 14:30	11/23/15 22:19	JHV

Analytical Results

Sample I.D. GW-2 Laboratory Sample ID: 15K0390-08

Date/Time Sampled: 11/17/2015 08:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	08	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:01	KEW
Arsenic	08	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:02	KEW
Barium	08	SW6010C	0.616 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:01	KEW
Cadmium	08	SW6010C	0.0066 mg/L		0.0050	1	11/19/15 15:00	11/23/15 19:02	KEW
Chromium	08	SW6010C	0.0644 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:02	KEW
Mercury	08	SW7470A	<0.00020 mg/L		0.00020	1	11/20/15 09:30	11/20/15 14:53	MWL
Lead	08	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:02	KEW
Selenium	08	SW6010C	<0.0500 mg/L		0.0500	1	11/19/15 15:00	11/23/15 19:02	KEW

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	08	SW8015C	<0.10 mg/L		0.10	1	11/19/15 14:28	11/19/15 14:28	CL
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Volatile Organic Compounds by GCMS

Benzene	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD
Ethylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD
m+p-Xylenes	08	SW8260B	<2.00 ug/L		2.00	1	11/20/15 12:47	11/20/15 12:47	MKD
Methyl-t-butyl ether (MTBE)	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD



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3701 Saunders Ave. Date Issued: November 24, 2015 17:24
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Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. GW-2 Laboratory Sample ID: 15K0390-08

Date/Time Sampled: 11/17/2015 08:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Naphthalene	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD
o-Xylene	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD
Toluene	08	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:47	11/20/15 12:47	MKD
Xylenes, Total	08	SW8260B	<3.00 ug/L		3.00	1	11/20/15 12:47	11/20/15 12:47	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	08	SW8260B	109 %		70-120		11/20/15 12:47	11/20/15 12:47	MKD
<i>Surr: 4-Bromofluorobenzene</i>	08	SW8260B	88.5 %		75-120		11/20/15 12:47	11/20/15 12:47	MKD
<i>Surr: Dibromofluoromethane</i>	08	SW8260B	102 %		80-119		11/20/15 12:47	11/20/15 12:47	MKD
<i>Surr: Toluene-d8</i>	08	SW8260B	100 %		85-120		11/20/15 12:47	11/20/15 12:47	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	08	SW8015C	<0.50 mg/L		0.50	1	11/23/15 14:30	11/23/15 22:45	JHV
<i>Surr: Pentacosane</i>	08	SW8015C	82.6 %		40-160		11/23/15 14:30	11/23/15 22:45	JHV

Analytical Results

Sample I.D. GW-3 Laboratory Sample ID: 15K0390-09

Date/Time Sampled: 11/17/2015 08:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	09	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:06	KEW
Arsenic	09	SW6010C	0.0105 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:06	KEW
Barium	09	SW6010C	0.121 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:06	KEW
Cadmium	09	SW6010C	<0.0050 mg/L		0.0050	1	11/19/15 15:00	11/23/15 19:06	KEW
Chromium	09	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:06	KEW
Mercury	09	SW7470A	<0.00020 mg/L		0.00020	1	11/20/15 09:30	11/20/15 14:55	MWL
Lead	09	SW6010C	<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:06	KEW



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Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results		Laboratory Sample ID: 15K0390-09								
Sample I.D.	GW-3	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods										
Selenium	09	SW6010C		<0.0500 mg/L		0.0500	1	11/19/15 15:00	11/23/15 19:06	KEW
Volatile Hydrocarbons by GC										
TPH-Volatiles (GRO)	09	SW8015C		<0.10 mg/L		0.10	1	11/19/15 14:51	11/19/15 14:51	CL
Volatile Organic Compounds by GCMS										
Benzene	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
Ethylbenzene	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
m+p-Xylenes	09	SW8260B		<2.00 ug/L		2.00	1	11/20/15 13:11	11/20/15 13:11	MKD
Methyl-t-butyl ether (MTBE)	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
Naphthalene	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
o-Xylene	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
Toluene	09	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:11	11/20/15 13:11	MKD
Xylenes, Total	09	SW8260B		<3.00 ug/L		3.00	1	11/20/15 13:11	11/20/15 13:11	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	09	SW8260B		107 %		70-120		11/20/15 13:11	11/20/15 13:11	MKD
<i>Surr: 4-Bromofluorobenzene</i>	09	SW8260B		87.2 %		75-120		11/20/15 13:11	11/20/15 13:11	MKD
<i>Surr: Dibromofluoromethane</i>	09	SW8260B		99.2 %		80-119		11/20/15 13:11	11/20/15 13:11	MKD
<i>Surr: Toluene-d8</i>	09	SW8260B		102 %		85-120		11/20/15 13:11	11/20/15 13:11	MKD
Semivolatile Hydrocarbons by GC										
TPH-Semi-Volatiles (DRO)	09	SW8015C		<0.50 mg/L		0.50	1	11/23/15 14:30	11/23/15 23:11	JHV
<i>Surr: Pentacosane</i>	09	SW8015C		100 %		40-160		11/23/15 14:30	11/23/15 23:11	JHV



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Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results		Laboratory Sample ID: 15K0390-10								
Sample I.D.	GW-4	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods										
Silver	10RE1	SW6010C		<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/24/15 16:28	KEW
Arsenic	10	SW6010C		<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:21	KEW
Barium	10	SW6010C		0.313 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:21	KEW
Cadmium	10	SW6010C		<0.0050 mg/L		0.0050	1	11/19/15 15:00	11/23/15 19:21	KEW
Chromium	10	SW6010C		0.0222 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:21	KEW
Mercury	10	SW7470A		<0.00020 mg/L		0.00020	1	11/20/15 09:30	11/20/15 15:01	MWL
Lead	10	SW6010C		<0.0100 mg/L		0.0100	1	11/19/15 15:00	11/23/15 19:21	KEW
Selenium	10	SW6010C		<0.0500 mg/L		0.0500	1	11/19/15 15:00	11/23/15 19:21	KEW
Volatile Hydrocarbons by GC										
TPH-Volatiles (GRO)	10	SW8015C		<0.10 mg/L		0.10	1	11/19/15 15:14	11/19/15 15:14	CL
Volatile Organic Compounds by GCMS										
Benzene	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
Ethylbenzene	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
m+p-Xylenes	10	SW8260B		<2.00 ug/L		2.00	1	11/20/15 13:34	11/20/15 13:34	MKD
Methyl-t-butyl ether (MTBE)	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
Naphthalene	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
o-Xylene	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
Toluene	10	SW8260B		<1.00 ug/L		1.00	1	11/20/15 13:34	11/20/15 13:34	MKD
Xylenes, Total	10	SW8260B		<3.00 ug/L		3.00	1	11/20/15 13:34	11/20/15 13:34	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	10	SW8260B		105 %		70-120		11/20/15 13:34	11/20/15 13:34	MKD
<i>Surr: 4-Bromofluorobenzene</i>	10	SW8260B		88.5 %		75-120		11/20/15 13:34	11/20/15 13:34	MKD
<i>Surr: Dibromofluoromethane</i>	10	SW8260B		98.8 %		80-119		11/20/15 13:34	11/20/15 13:34	MKD
<i>Surr: Toluene-d8</i>	10	SW8260B		102 %		85-120		11/20/15 13:34	11/20/15 13:34	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. GW-4 Laboratory Sample ID: 15K0390-10

Date/Time Sampled: 11/17/2015 09:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	10	SW8015C	<0.50 mg/L		0.50	1	11/23/15 14:30	11/23/15 23:38	JHV
Surr: Pentacosane	10	SW8015C	95.2 %		40-160		11/23/15 14:30	11/23/15 23:38	JHV

Analytical Results

Sample I.D. SS-9 (11-13) Laboratory Sample ID: 15K0390-11

Date/Time Sampled: 11/17/2015 09:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	11	SW6010C	<0.682 mg/kg dry		0.682	1	11/19/15 10:20	11/24/15 16:13	KEW
Arsenic	11	SW6010C	<1.36 mg/kg dry		1.36	1	11/19/15 10:20	11/24/15 16:14	KEW
Barium	11	SW6010C	111 mg/kg dry		0.682	1	11/19/15 10:20	11/24/15 16:13	KEW
Cadmium	11	SW6010C	0.580 mg/kg dry		0.273	1	11/19/15 10:20	11/24/15 16:14	KEW
Chromium	11	SW6010C	9.64 mg/kg dry		0.682	1	11/19/15 10:20	11/24/15 16:14	KEW
Mercury	11	SW7471B	<0.011 mg/kg dry		0.011	1	11/23/15 15:00	11/24/15 11:27	MWL
Lead	11	SW6010C	<0.682 mg/kg dry		0.682	1	11/19/15 10:20	11/24/15 16:14	KEW
Selenium	11	SW6010C	<3.41 mg/kg dry		3.41	1	11/19/15 10:20	11/24/15 16:14	KEW

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	11RE1	SW8015C	<5.63 mg/kg dry		5.63	50	11/19/15 18:06	11/19/15 18:06	CL
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Volatile Organic Compounds by GCMS

Benzene	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
Ethylbenzene	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
m+p-Xylenes	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
Methyl-t-butyl ether (MTBE)	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-9 (11-13) Laboratory Sample ID: 15K0390-11

Date/Time Sampled: 11/17/2015 09:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Naphthalene	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
o-Xylene	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
Toluene	11	SW8260B	<7.07 ug/kg dry		7.07	1	11/19/15 15:10	11/19/15 15:10	MKD
Xylenes, Total	11	SW8260B	<21.2 ug/kg dry		21.2	1	11/19/15 15:10	11/19/15 15:10	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	11	SW8260B	112 %		80-120		11/19/15 15:10	11/19/15 15:10	MKD
<i>Surr: 4-Bromofluorobenzene</i>	11	SW8260B	92.0 %		85-120		11/19/15 15:10	11/19/15 15:10	MKD
<i>Surr: Dibromofluoromethane</i>	11	SW8260B	100 %		78-119		11/19/15 15:10	11/19/15 15:10	MKD
<i>Surr: Toluene-d8</i>	11	SW8260B	102 %		85-115		11/19/15 15:10	11/19/15 15:10	MKD
Semivolatile Organic Compounds by GCMS									
1,2,4,5-Tetrachlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1,2,4-Trichlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1,2-Dichlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1,2-Diphenylhydrazine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1,3-Dichlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1,4-Dichlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1-Chloronaphthalene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
1-Naphthylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,3,4,6-Tetrachlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4,5-Trichlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4,6-Trichlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4-Dichlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4-Dimethylphenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4-Dinitrophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,4-Dinitrotoluene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,6-Dichlorophenol	11	SW8270D	<117 ug/kg dry	C	117	1	11/23/15 10:16	11/23/15 14:53	JHV
2,6-Dinitrotoluene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-11								
Date/Time Sampled: 11/17/2015 09:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2-Chlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2-Methylnaphthalene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2-Naphthylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2-Nitroaniline	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
2-Nitrophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
3,3'-Dichlorobenzidine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
3-Methylcholanthrene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
3-Nitroaniline	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4,6-Dinitro-2-methylphenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Aminobiphenyl	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Bromophenyl phenyl ether	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Chloroaniline	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Chlorophenyl phenyl ether	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Nitroaniline	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
4-Nitrophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
7,12-Dimethylbenz (a) anthracene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Acenaphthene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Acenaphthylene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Acetophenone	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Aniline	11	SW8270D	<117 ug/kg dry	C	117	1	11/23/15 10:16	11/23/15 14:53	JHV
Anthracene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzidine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzo (a) anthracene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzo (a) pyrene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzo (b) fluoranthene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-11								
Date/Time Sampled: 11/17/2015 09:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzo (k) fluoranthene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzoic acid	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Benzyl alcohol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
bis (2-Chloroethoxy) methane	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
bis (2-Chloroethyl) ether	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
bis (2-Chloroisopropyl) ether	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
bis (2-Ethylhexyl) phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Butyl benzyl phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Chrysene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Dibenz (a,h) anthracene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Dibenz (a,j) acridine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Dibenzofuran	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Diethyl phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Dimethyl phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Di-n-butyl phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Di-n-octyl phthalate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Diphenylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Ethyl methanesulfonate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Fluoranthene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Fluorene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Hexachlorobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Hexachlorobutadiene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Hexachlorocyclopentadiene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Hexachloroethane	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Indeno (1,2,3-cd) pyrene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-11								
Date/Time Sampled: 11/17/2015 09:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Isophorone	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
m+p-Cresols	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Methyl methanesulfonate	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Naphthalene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Nitrobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
n-Nitrosodimethylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
n-Nitrosodi-n-butylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
n-Nitrosodi-n-propylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
n-Nitrosodiphenylamine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
n-Nitrosopiperidine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
o+m+p-Cresols	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
o-Cresol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
p-(Dimethylamino)azobenzene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
p-Chloro-m-cresol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Pentachloronitrobenzene (quintozone)	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Pentachlorophenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Phenacetin	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Phenanthrene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Phenol	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Pronamide	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Pyrene	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Pyridine	11	SW8270D	<117 ug/kg dry		117	1	11/23/15 10:16	11/23/15 14:53	JHV
Surr: 2,4,6-Tribromophenol	11	SW8270D	63.0 %		35-125		11/23/15 10:16	11/23/15 14:53	JHV
Surr: 2-Fluorobiphenyl	11	SW8270D	56.6 %		45-105		11/23/15 10:16	11/23/15 14:53	JHV
Surr: 2-Fluorophenol	11	SW8270D	59.7 %		35-105		11/23/15 10:16	11/23/15 14:53	JHV



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-9 (11-13) Laboratory Sample ID: 15K0390-11

Date/Time Sampled: 11/17/2015 09:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Surr: Nitrobenzene-d5	11	SW8270D	60.2 %		35-100		11/23/15 10:16	11/23/15 14:53	JHV
Surr: Phenol-d5	11	SW8270D	56.5 %		40-100		11/23/15 10:16	11/23/15 14:53	JHV
Surr: p-Terphenyl-d14	11	SW8270D	79.7 %		30-125		11/23/15 10:16	11/23/15 14:53	JHV
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	11	SW8015C	<13.4 mg/kg dry		13.4	1	11/20/15 11:13	11/23/15 15:58	JHV
Surr: Pentacosane	11	SW8015C	69.5 %		40-160		11/20/15 11:13	11/23/15 15:58	JHV
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1221	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1232	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1242	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1248	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1254	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
PCB as Aroclor 1260	11	SW8082A	<0.135 mg/kg dry		0.135	1	11/23/15 12:07	11/24/15 02:16	SKS
Surr: DCB	11	SW8082A	70.0 %		30-105		11/23/15 12:07	11/24/15 02:16	SKS
Surr: TCMX	11	SW8082A	65.0 %		30-105		11/23/15 12:07	11/24/15 02:16	SKS
Wet Chemistry Analysis									
Percent Solids	11	SM18 2540G	70.7 %		0.10	1	11/19/15 15:24	11/19/15 15:24	RCV

Analytical Results

Sample I.D. SS-6 (11-13) Laboratory Sample ID: 15K0390-12

Date/Time Sampled: 11/17/2015 10:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results									
Sample I.D.	Laboratory Sample ID: 15K0390-12								
Date/Time Sampled: 11/17/2015 10:10									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	12	SW6010C	<0.598 mg/kg dry		0.598	1	11/19/15 10:20	11/24/15 16:19	KEW
Arsenic	12	SW6010C	<1.20 mg/kg dry		1.20	1	11/19/15 10:20	11/24/15 16:19	KEW
Barium	12	SW6010C	288 mg/kg dry		0.598	1	11/19/15 10:20	11/24/15 16:19	KEW
Cadmium	12	SW6010C	3.87 mg/kg dry		0.239	1	11/19/15 10:20	11/24/15 16:19	KEW
Chromium	12	SW6010C	601 mg/kg dry		0.598	1	11/19/15 10:20	11/24/15 16:19	KEW
Mercury	12	SW7471B	0.012 mg/kg dry		0.009	1	11/23/15 15:00	11/24/15 11:30	MWL
Lead	12	SW6010C	2.16 mg/kg dry		0.598	1	11/19/15 10:20	11/24/15 16:19	KEW
Selenium	12	SW6010C	<2.99 mg/kg dry		2.99	1	11/19/15 10:20	11/24/15 16:19	KEW
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	12	SW8015C	<0.10 mg/kg dry		0.10	1	11/19/15 15:51	11/19/15 15:51	CL
Volatile Organic Compounds by GCMS									
Benzene	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
Ethylbenzene	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
m+p-Xylenes	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
Methyl-t-butyl ether (MTBE)	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
Naphthalene	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
o-Xylene	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
Toluene	12	SW8260B	<6.05 ug/kg dry		6.05	1	11/19/15 15:34	11/19/15 15:34	MKD
Xylenes, Total	12	SW8260B	<18.2 ug/kg dry		18.2	1	11/19/15 15:34	11/19/15 15:34	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	12	SW8260B	112 %		80-120		11/19/15 15:34	11/19/15 15:34	MKD
<i>Surr: 4-Bromofluorobenzene</i>	12	SW8260B	91.8 %		85-120		11/19/15 15:34	11/19/15 15:34	MKD
<i>Surr: Dibromofluoromethane</i>	12	SW8260B	101 %		78-119		11/19/15 15:34	11/19/15 15:34	MKD
<i>Surr: Toluene-d8</i>	12	SW8260B	102 %		85-115		11/19/15 15:34	11/19/15 15:34	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R
3701 Saunders Ave.
Richmond VA, 23227 Date Received: November 17, 2015 16:15
Date Issued: November 24, 2015 17:24

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-6 (11-13) Laboratory Sample ID: 15K0390-12

Date/Time Sampled: 11/17/2015 10:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	12	SW8015C	<11.6 mg/kg dry		11.6	1	11/20/15 11:13	11/23/15 16:24	JHV
Sur: Pentacosane	12	SW8015C	67.7 %		40-160		11/20/15 11:13	11/23/15 16:24	JHV
Wet Chemistry Analysis									
Percent Solids	12	SM18 2540G	82.6 %		0.10	1	11/19/15 15:26	11/19/15 15:26	RCV

Analytical Results

Sample I.D. SS-5 (11-13) Laboratory Sample ID: 15K0390-13

Date/Time Sampled: 11/17/2015 10:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	13	SW6010C	<0.558 mg/kg dry		0.558	1	11/19/15 10:20	11/24/15 16:24	KEW
Arsenic	13	SW6010C	<1.12 mg/kg dry		1.12	1	11/19/15 10:20	11/24/15 16:24	KEW
Barium	13	SW6010C	25.4 mg/kg dry		0.558	1	11/19/15 10:20	11/24/15 16:24	KEW
Cadmium	13	SW6010C	0.846 mg/kg dry		0.223	1	11/19/15 10:20	11/24/15 16:24	KEW
Chromium	13	SW6010C	5.23 mg/kg dry		0.558	1	11/19/15 10:20	11/24/15 16:24	KEW
Mercury	13	SW7471B	<0.009 mg/kg dry		0.009	1	11/23/15 15:00	11/24/15 11:32	MWL
Lead	13	SW6010C	3.83 mg/kg dry		0.558	1	11/19/15 10:20	11/24/15 16:24	KEW
Selenium	13	SW6010C	<2.79 mg/kg dry		2.79	1	11/19/15 10:20	11/24/15 16:24	KEW
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	13	SW8015C	<0.10 mg/kg dry		0.10	1	11/19/15 16:14	11/19/15 16:14	CL
Volatile Organic Compounds by GCMS									
Benzene	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
Ethylbenzene	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. SS-5 (11-13) Laboratory Sample ID: 15K0390-13

Date/Time Sampled: 11/17/2015 10:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
m+p-Xylenes	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
Methyl-t-butyl ether (MTBE)	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
Naphthalene	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
o-Xylene	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
Toluene	13	SW8260B	<5.77 ug/kg dry		5.77	1	11/19/15 15:58	11/19/15 15:58	MKD
Xylenes, Total	13	SW8260B	<17.3 ug/kg dry		17.3	1	11/19/15 15:58	11/19/15 15:58	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	13	SW8260B	112 %		80-120		11/19/15 15:58	11/19/15 15:58	MKD
<i>Surr: 4-Bromofluorobenzene</i>	13	SW8260B	91.2 %		85-120		11/19/15 15:58	11/19/15 15:58	MKD
<i>Surr: Dibromofluoromethane</i>	13	SW8260B	101 %		78-119		11/19/15 15:58	11/19/15 15:58	MKD
<i>Surr: Toluene-d8</i>	13	SW8260B	104 %		85-115		11/19/15 15:58	11/19/15 15:58	MKD
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	13	SW8015C	<11.3 mg/kg dry		11.3	1	11/20/15 11:13	11/23/15 16:51	JHV
<i>Surr: Pentacosane</i>	13	SW8015C	61.7 %		40-160		11/20/15 11:13	11/23/15 16:51	JHV
Wet Chemistry Analysis									
Percent Solids	13	SM18 2540G	86.7 %		0.10	1	11/19/15 15:28	11/19/15 15:28	RCV

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 15K0390-14

Date/Time Sampled: 11/10/2015 09:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	14	SW8015C	<0.10 mg/L		0.10	1	11/19/15 12:33	11/19/15 12:33	CL
Volatile Organic Compounds by GCMS									



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Laboratory Order ID: 15K0390

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 15K0390-14

Date/Time Sampled: 11/10/2015 09:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Benzene	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
Ethylbenzene	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
m+p-Xylenes	14	SW8260B	<2.00 ug/L		2.00	1	11/20/15 12:00	11/20/15 12:00	MKD
Methyl-t-butyl ether (MTBE)	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
Naphthalene	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
o-Xylene	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
Toluene	14	SW8260B	<1.00 ug/L		1.00	1	11/20/15 12:00	11/20/15 12:00	MKD
Xylenes, Total	14	SW8260B	<3.00 ug/L		3.00	1	11/20/15 12:00	11/20/15 12:00	MKD
<i>Surr: 1,2-Dichloroethane-d4</i>	14	SW8260B	107 %		70-120		11/20/15 12:00	11/20/15 12:00	MKD
<i>Surr: 4-Bromofluorobenzene</i>	14	SW8260B	88.7 %		75-120		11/20/15 12:00	11/20/15 12:00	MKD
<i>Surr: Dibromofluoromethane</i>	14	SW8260B	102 %		80-119		11/20/15 12:00	11/20/15 12:00	MKD
<i>Surr: Toluene-d8</i>	14	SW8260B	99.7 %		85-120		11/20/15 12:00	11/20/15 12:00	MKD



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Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Analytical Summary

Preparation Method:

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
15K0390-07	50.0 mL / 50.0 mL	SW6010C	BYK0585	SYK0763	AK50120
15K0390-08	50.0 mL / 50.0 mL	SW6010C	BYK0585	SYK0763	AK50120
15K0390-09	50.0 mL / 50.0 mL	SW6010C	BYK0585	SYK0763	AK50120
15K0390-10	50.0 mL / 50.0 mL	SW6010C	BYK0585	SYK0763	AK50120
15K0390-10RE1	50.0 mL / 50.0 mL	SW6010C	BYK0585	SYK0800	AK50131
 Sample ID					
Preparation Factors Initial / Final					
Method					
Batch ID					
Sequence ID					
Calibration ID					
Wet Chemistry Analysis					
15K0390-01	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-02	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-03	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-04	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-05	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-06	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-11	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-12	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
15K0390-13	1.00 g / 1.00 mL	SM18 2540G	BYK0572	SYK0655	
 Sample ID					
Preparation Factors Initial / Final					
Method					
Batch ID					
Sequence ID					
Calibration ID					
Metals (Total) by EPA 6000/7000 Series Methods					
15K0390-01	1.02 g / 50.0 mL	SW6010C	BYK0582	SYK0700	AK50113
15K0390-02	1.08 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-03	1.08 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-04	1.00 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-05	1.02 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-06	1.03 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-11	1.04 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
15K0390-12	1.01 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
15K0390-13	1.04 g / 50.0 mL	SW6010C	BYK0582	SYK0799	AK50131
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pesticides and PCBs by GC/ECD		Preparation Method:	SW3550B		
15K0390-06	32.1 g / 5.00 mL	SW8082A	BYK0671	SYK0786	AJ50093
15K0390-11	31.4 g / 5.00 mL	SW8082A	BYK0671	SYK0786	AJ50093
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic Compounds by GCMS		Preparation Method:	SW3550C		
15K0390-06	30.0 g / 1.00 mL	SW8270D	BYK0637	SYK0766	AJ50039
15K0390-06RE1	30.0 g / 1.00 mL	SW8270D	BYK0637	SYK0766	AJ50039
15K0390-11	30.1 g / 1.00 mL	SW8270D	BYK0637	SYK0766	AJ50039
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Hydrocarbons by GC		Preparation Method:	SW5030B		
15K0390-07	5.00 mL / 5.00 mL	SW8015C	BYK0565	SYK0663	AJ50153
15K0390-08	5.00 mL / 5.00 mL	SW8015C	BYK0565	SYK0663	AJ50153
15K0390-09	5.00 mL / 5.00 mL	SW8015C	BYK0565	SYK0663	AJ50153
15K0390-10	5.00 mL / 5.00 mL	SW8015C	BYK0565	SYK0663	AJ50153
15K0390-14	5.00 mL / 5.00 mL	SW8015C	BYK0565	SYK0663	AJ50153
Volatile Hydrocarbons by GC		Preparation Method:	SW5030B		
15K0390-01	6.35 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-02	6.95 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-02RE1	6.89 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-03	6.75 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-04	6.34 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-05	7.20 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-05RE1	5.08 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-06	7.10 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-11	6.63 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043



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3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
15K0390-11RE1	6.28 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-12	7.62 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
15K0390-13	7.34 g / 5.00 mL	SW8015C	BYK0566	SYK0665	AJ50043
Volatile Organic Compounds by GCMS					
15K0390-07	5.00 mL / 5.00 mL	SW8260B	BYK0595	SYK0683	AK50092
15K0390-08	5.00 mL / 5.00 mL	SW8260B	BYK0595	SYK0683	AK50092
15K0390-09	5.00 mL / 5.00 mL	SW8260B	BYK0595	SYK0683	AK50092
15K0390-10	5.00 mL / 5.00 mL	SW8260B	BYK0595	SYK0683	AK50092
15K0390-14	5.00 mL / 5.00 mL	SW8260B	BYK0595	SYK0683	AK50092
Volatile Organic Compounds by GCMS					
15K0390-01	7.44 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-02	6.65 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-02RE1	6.89 g / 5.00 mL	SW8260B	BYK0600	SYK0717	AK50092
15K0390-03	5.76 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-04	7.18 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-05	8.69 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-06	7.29 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-11	5.58 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-12	6.34 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
15K0390-13	8.05 g / 5.00 mL	SW8260B	BYK0600	SYK0689	AK50092
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
15K0390-07	20.0 mL / 20.0 mL	SW7470A	BYK0609	SYK0704	AK50117
15K0390-08	20.0 mL / 20.0 mL	SW7470A	BYK0609	SYK0704	AK50117
15K0390-09	20.0 mL / 20.0 mL	SW7470A	BYK0609	SYK0704	AK50117
15K0390-10	20.0 mL / 20.0 mL	SW7470A	BYK0609	SYK0704	AK50117
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
15K0390-01	0.512 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-02	0.584 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-03	0.551 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
15K0390-04	0.530 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-05	0.566 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-06	0.553 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-11	0.500 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-12	0.536 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
15K0390-13	0.541 g / 20.0 mL	SW7471B	BYK0676	SYK0780	AK50126
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
15K0390-01	50.5 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-02	51.0 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-03	50.3 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-04	53.4 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-05	50.1 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-06	50.7 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-11	52.8 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-12	52.2 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
15K0390-13	51.2 g / 1.00 mL	SW8015C	BYK0594	SYK0759	AH50153
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
15K0390-07	990 mL / 1.00 mL	SW8015C	BYK0646	SYK0760	AJ50157
15K0390-08	1000 mL / 1.00 mL	SW8015C	BYK0646	SYK0760	AJ50157
15K0390-09	1000 mL / 1.00 mL	SW8015C	BYK0646	SYK0760	AJ50157
15K0390-10	980 mL / 1.00 mL	SW8015C	BYK0646	SYK0760	AJ50157



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Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BYK0582 - SW3050B

Blank (BYK0582-BLK1)		Prepared: 11/19/2015 Analyzed: 11/20/2015						
Selenium	<2.48 mg/kg wet	2.48	mg/kg wet					
Lead	<0.496 mg/kg wet	0.496	mg/kg wet					
Chromium	<0.496 mg/kg wet	0.496	mg/kg wet					
Arsenic	<0.992 mg/kg wet	0.992	mg/kg wet					
Silver	<0.496 mg/kg wet	0.496	mg/kg wet					
Cadmium	<0.198 mg/kg wet	0.198	mg/kg wet					
Barium	<0.496 mg/kg wet	0.496	mg/kg wet					

LCS (BYK0582-BS1)		Prepared: 11/19/2015 Analyzed: 11/20/2015						
Cadmium	98.8 mg/kg wet	0.198	mg/kg wet	99.0	99.8	80-120		
Silver	4.92 mg/kg wet	0.495	mg/kg wet	4.95	99.4	80-120		
Selenium	96.2 mg/kg wet	2.48	mg/kg wet	99.0	97.1	80-120		
Lead	104 mg/kg wet	0.495	mg/kg wet	99.0	105	80-120		
Chromium	102 mg/kg wet	0.495	mg/kg wet	99.0	103	80-120		
Arsenic	102 mg/kg wet	0.990	mg/kg wet	99.0	103	80-120		
Barium	102 mg/kg wet	0.495	mg/kg wet	99.0	103	80-120		

LCS Dup (BYK0582-BSD1)		Prepared: 11/19/2015 Analyzed: 11/20/2015						
Silver	4.21 mg/kg wet	0.482	mg/kg wet	4.82	87.5	80-120	15.5	20
Barium	87.9 mg/kg wet	0.482	mg/kg wet	96.3	91.3	80-120	15.2	20
Chromium	87.3 mg/kg wet	0.482	mg/kg wet	96.3	90.7	80-120	15.4	20
Lead	89.4 mg/kg wet	0.482	mg/kg wet	96.3	92.8	80-120	14.6	20
Arsenic	87.4 mg/kg wet	0.963	mg/kg wet	96.3	90.8	80-120	15.4	20
Selenium	82.5 mg/kg wet	2.41	mg/kg wet	96.3	85.7	80-120	15.2	20
Cadmium	84.9 mg/kg wet	0.193	mg/kg wet	96.3	88.1	80-120	15.1	20

Matrix Spike (BYK0582-MS1)		Source: 15K0390-01 Prepared: 11/19/2015 Analyzed: 11/20/2015						
Selenium	97.1 mg/kg dry	3.12	mg/kg dry	125 <3.12 mg/kg dry	77.8	75-125		
Barium	244 mg/kg dry	0.624	mg/kg dry	125 140 mg/kg dry	83.3	75-125		
Arsenic	85.8 mg/kg dry	1.25	mg/kg dry	125 <1.25 mg/kg dry	68.7	75-125		M
Cadmium	112 mg/kg dry	0.250	mg/kg dry	125 2.96 mg/kg dry	87.7	75-125		
Lead	111 mg/kg dry	0.624	mg/kg dry	125 1.37 mg/kg dry	87.9	75-125		
Chromium	145 mg/kg dry	0.624	mg/kg dry	125 26.0 mg/kg dry	95.3	75-125		



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Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0582 - SW3050B

Matrix Spike (BYK0582-MS1) Source: 15K0390-01 Prepared: 11/19/2015 Analyzed: 11/20/2015

Silver	5.22 mg/kg dry	0.624	mg/kg dry	6.24	<0.624 mg/kg dry	83.6	75-125
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Matrix Spike (BYK0582-MS2) Source: 15K0390-05 Prepared: 11/19/2015 Analyzed: 11/24/2015

Cadmium	122 mg/kg dry	0.246	mg/kg dry	123	2.85 mg/kg dry	96.4	75-125
Barium	301 mg/kg dry	0.615	mg/kg dry	123	183 mg/kg dry	95.8	75-125
Arsenic	90.3 mg/kg dry	1.23	mg/kg dry	123	<1.23 mg/kg dry	73.4	75-125
Selenium	105 mg/kg dry	3.08	mg/kg dry	123	<3.08 mg/kg dry	85.1	75-125
Lead	122 mg/kg dry	0.615	mg/kg dry	123	<0.615 mg/kg dry	98.9	75-125
Chromium	134 mg/kg dry	0.615	mg/kg dry	123	8.71 mg/kg dry	102	75-125
Silver	5.62 mg/kg dry	0.615	mg/kg dry	6.15	<0.615 mg/kg dry	91.3	75-125

Matrix Spike Dup (BYK0582-MSD1) Source: 15K0390-01 Prepared: 11/19/2015 Analyzed: 11/20/2015

Cadmium	105 mg/kg dry	0.239	mg/kg dry	119	2.96 mg/kg dry	85.9	75-125	6.44	20
Silver	4.81 mg/kg dry	0.597	mg/kg dry	5.97	<0.597 mg/kg dry	80.5	75-125	8.31	20
Lead	104 mg/kg dry	0.597	mg/kg dry	119	1.37 mg/kg dry	86.3	75-125	6.26	20
Selenium	91.4 mg/kg dry	2.98	mg/kg dry	119	<2.98 mg/kg dry	76.6	75-125	6.11	20
Arsenic	80.9 mg/kg dry	1.19	mg/kg dry	119	<1.19 mg/kg dry	67.8	75-125	5.85	20
Barium	212 mg/kg dry	0.597	mg/kg dry	119	140 mg/kg dry	60.1	75-125	14.2	20
Chromium	137 mg/kg dry	0.597	mg/kg dry	119	26.0 mg/kg dry	92.6	75-125	5.96	20

Matrix Spike Dup (BYK0582-MSD2) Source: 15K0390-05 Prepared: 11/19/2015 Analyzed: 11/24/2015

Silver	5.22 mg/kg dry	0.574	mg/kg dry	5.74	<0.574 mg/kg dry	91.0	75-125	7.29	20
Arsenic	72.3 mg/kg dry	1.15	mg/kg dry	115	<1.15 mg/kg dry	63.0	75-125	22.1	20
Selenium	87.9 mg/kg dry	2.87	mg/kg dry	115	<2.87 mg/kg dry	76.5	75-125	17.5	20
Cadmium	103 mg/kg dry	0.230	mg/kg dry	115	2.85 mg/kg dry	87.5	75-125	16.2	20
Lead	104 mg/kg dry	0.574	mg/kg dry	115	<0.574 mg/kg dry	90.9	75-125	15.3	20
Chromium	116 mg/kg dry	0.574	mg/kg dry	115	8.71 mg/kg dry	93.4	75-125	14.2	20
Barium	361 mg/kg dry	0.574	mg/kg dry	115	183 mg/kg dry	155	75-125	18.3	20



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Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BYK0585 - EPA200.2/R2.8

Blank (BYK0585-BLK1)		Prepared: 11/19/2015 Analyzed: 11/23/2015						
Arsenic	<0.0100 mg/L	0.0100	mg/L					
Barium	<0.0100 mg/L	0.0100	mg/L					
Cadmium	<0.0050 mg/L	0.0050	mg/L					
Chromium	<0.0100 mg/L	0.0100	mg/L					
Lead	<0.0100 mg/L	0.0100	mg/L					
Selenium	<0.0500 mg/L	0.0500	mg/L					
Silver	<0.0100 mg/L	0.0100	mg/L					

LCS (BYK0585-BS1)		Prepared: 11/19/2015 Analyzed: 11/23/2015						
Arsenic	0.550 mg/L	0.0100	mg/L	0.500	110	80-120		
Barium	0.541 mg/L	0.0100	mg/L	0.500	108	80-120		
Cadmium	0.540 mg/L	0.0050	mg/L	0.500	108	80-120		
Chromium	0.541 mg/L	0.0100	mg/L	0.500	108	80-120		
Lead	0.545 mg/L	0.0100	mg/L	0.500	109	80-120		
Selenium	0.523 mg/L	0.0500	mg/L	0.500	105	80-120		
Silver	0.107 mg/L	0.0100	mg/L	0.100	107	80-120		

LCS Dup (BYK0585-BSD1)		Prepared: 11/19/2015 Analyzed: 11/23/2015						
Arsenic	0.535 mg/L	0.0100	mg/L	0.500	107	80-120	2.62	20
Barium	0.530 mg/L	0.0100	mg/L	0.500	106	80-120	2.11	20
Cadmium	0.526 mg/L	0.0050	mg/L	0.500	105	80-120	2.64	20
Chromium	0.528 mg/L	0.0100	mg/L	0.500	106	80-120	2.38	20
Lead	0.537 mg/L	0.0100	mg/L	0.500	107	80-120	1.53	20
Selenium	0.518 mg/L	0.0500	mg/L	0.500	104	80-120	1.12	20
Silver	0.105 mg/L	0.0100	mg/L	0.100	105	80-120	1.83	20

Matrix Spike (BYK0585-MS1)		Source: 15K0390-09 Prepared: 11/19/2015 Analyzed: 11/23/2015						
Arsenic	0.553 mg/L	0.0100	mg/L	0.500 0.0105 mg/L	108	75-125		
Barium	0.659 mg/L	0.0100	mg/L	0.500 0.121 mg/L	108	75-125		
Cadmium	0.531 mg/L	0.0050	mg/L	0.500 <0.0050 mg/L	106	75-125		
Chromium	0.542 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125		
Lead	0.536 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125		
Selenium	0.522 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	104	75-125		



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0585 - EPA200.2/R2.8

Matrix Spike (BYK0585-MS1)		Source: 15K0390-09		Prepared: 11/19/2015 Analyzed: 11/23/2015					
Silver	0.108 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	108	75-125			

Matrix Spike (BYK0585-MS2)		Source: 15K0414-09		Prepared: 11/19/2015 Analyzed: 11/23/2015					
Arsenic	0.565 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	113	75-125			
Barium	0.542 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125			
Cadmium	0.527 mg/L	0.0050	mg/L	0.500 <0.0050 mg/L	105	75-125			
Chromium	0.535 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125			
Lead	0.548 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	110	75-125			
Selenium	0.528 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	106	75-125			
Silver	0.106 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	106	75-125			

Matrix Spike Dup (BYK0585-MSD1)		Source: 15K0390-09		Prepared: 11/19/2015 Analyzed: 11/23/2015					
Arsenic	0.550 mg/L	0.0100	mg/L	0.500 0.0105 mg/L	108	75-125	0.473	20	
Barium	0.654 mg/L	0.0100	mg/L	0.500 0.121 mg/L	106	75-125	0.811	20	
Cadmium	0.524 mg/L	0.0050	mg/L	0.500 <0.0050 mg/L	105	75-125	1.25	20	
Chromium	0.535 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	1.34	20	
Lead	0.536 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125	0.0607	20	
Selenium	0.530 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	106	75-125	1.50	20	
Silver	0.106 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	106	75-125	1.82	20	

Matrix Spike Dup (BYK0585-MSD2)		Source: 15K0414-09		Prepared: 11/19/2015 Analyzed: 11/23/2015					
Arsenic	0.568 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	114	75-125	0.539	20	
Barium	0.545 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125	0.646	20	
Cadmium	0.532 mg/L	0.0050	mg/L	0.500 <0.0050 mg/L	106	75-125	1.01	20	
Chromium	0.540 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125	0.840	20	
Lead	0.549 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	110	75-125	0.0900	20	
Selenium	0.527 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	105	75-125	0.159	20	
Silver	0.108 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	108	75-125	1.44	20	



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BYK0609 - SW7470A

<u>Blank (BYK0609-BLK1)</u>										Prepared & Analyzed: 11/20/2015
Mercury	<0.00020 mg/L	0.00020	mg/L							
<u>LCS (BYK0609-BS1)</u>										Prepared & Analyzed: 11/20/2015
Mercury	0.00261 mg/L	0.00020	mg/L	0.00250		105	80-120			
<u>LCS Dup (BYK0609-BSD1)</u>										Prepared & Analyzed: 11/20/2015
Mercury	0.00259 mg/L	0.00020	mg/L	0.00250		104	80-120	0.951	20	
<u>Matrix Spike (BYK0609-MS1)</u>					Source: 15K0390-09					Prepared & Analyzed: 11/20/2015
Mercury	0.00134 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	53.5	80-120			M
<u>Matrix Spike (BYK0609-MS2)</u>					Source: 15K0322-04					Prepared & Analyzed: 11/20/2015
Mercury	0.00209 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	83.7	80-120			
<u>Matrix Spike (BYK0609-MS3)</u>					Source: 15K0321-03					Prepared & Analyzed: 11/20/2015
Mercury	0.00236 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	94.4	80-120			
<u>Matrix Spike (BYK0609-MS4)</u>					Source: 15K0321-04					Prepared & Analyzed: 11/20/2015
Mercury	0.00239 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	95.4	80-120			
<u>Matrix Spike Dup (BYK0609-MSD1)</u>					Source: 15K0390-09					Prepared & Analyzed: 11/20/2015
Mercury	0.00142 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	56.8	80-120	6.05	20	M
<u>Matrix Spike Dup (BYK0609-MSD2)</u>					Source: 15K0322-04					Prepared & Analyzed: 11/20/2015
Mercury	0.00206 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	82.3	80-120	1.67	20	
<u>Matrix Spike Dup (BYK0609-MSD3)</u>					Source: 15K0321-03					Prepared & Analyzed: 11/20/2015
Mercury	0.00231 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	92.4	80-120	2.18	20	



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0609 - SW7470A

Matrix Spike Dup (BYK0609-MSD4)		Source: 15K0321-04		Prepared & Analyzed: 11/20/2015					
Mercury	0.00236 mg/L	0.00020	mg/L	0.00250	<0.00020 mg/L	94.3	80-120	1.20	20

Batch BYK0676 - SW7471A

Blank (BYK0676-BLK1)		Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	<0.008 mg/kg wet	0.008	mg/kg wet						
LCS (BYK0676-BS1)		Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.103 mg/kg wet	0.008	mg/kg wet	0.0949	109	80-120			
LCS Dup (BYK0676-BSD1)		Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.108 mg/kg wet	0.008	mg/kg wet	0.0978	110	80-120	4.30	20	
Matrix Spike (BYK0676-MS1)		Source: 15K0390-01 Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.142 mg/kg dry	0.010	mg/kg dry	0.125	<0.010 mg/kg dry	114	80-120		
Matrix Spike (BYK0676-MS2)		Source: 15K0352-08 Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.119 mg/kg wet	0.008	mg/kg wet	0.0916	0.018 mg/kg wet	110	80-120		
Matrix Spike Dup (BYK0676-MSD1)		Source: 15K0390-01 Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.132 mg/kg dry	0.009	mg/kg dry	0.112	<0.009 mg/kg dry	118	80-120	7.50	20
Matrix Spike Dup (BYK0676-MSD2)		Source: 15K0352-08 Prepared: 11/23/2015 Analyzed: 11/24/2015							
Mercury	0.131 mg/kg wet	0.008	mg/kg wet	0.0876	0.018 mg/kg wet	129	80-120	9.57	20 M



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Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
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Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Volatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BYK0565 - SW5030B

<u>Blank (BYK0565-BLK1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	<0.10 mg/L	0.10	mg/L					
<u>LCS (BYK0565-BS1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	0.98 mg/L	0.10	mg/L	1.00		97.6	70-130	
<u>LCS Dup (BYK0565-BSD1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	0.97 mg/L	0.10	mg/L	1.00		97.3	70-130	0.308
<u>Duplicate (BYK0565-DUP1)</u>						Source: 15K0407-01 Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	<0.10 mg/L	0.10	mg/L		<0.10 mg/L		NA	20
<u>Matrix Spike (BYK0565-MS1)</u>						Source: 15K0401-02 Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	0.99 mg/L	0.10	mg/L	1.00	<0.10 mg/L	98.6	70-130	
<u>Matrix Spike Dup (BYK0565-MSD1)</u>						Source: 15K0401-02 Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	0.99 mg/L	0.10	mg/L	1.00	<0.10 mg/L	99.1	70-130	0.535
								20

Batch BYK0566 - SW5030B

<u>Blank (BYK0566-BLK1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	<0.10 mg/kg wet	0.10	mg/kg wet					
<u>LCS (BYK0566-BS1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	1.03 mg/kg wet	0.10	mg/kg wet	0.973		106	70-130	
<u>LCS Dup (BYK0566-BSD1)</u>						Prepared & Analyzed: 11/19/2015		
TPH-Volatiles (GRO)	1.04 mg/kg wet	0.10	mg/kg wet	0.978		107	70-130	1.20
								20



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0566 - SW5030B

<u>Duplicate (BYK0566-DUP1)</u>		Source: 15K0438-01		Prepared & Analyzed: 11/19/2015			
TPH-Volatiles (GRO)	<0.10 mg/kg dry	0.10	mg/kg dry	<0.10 mg/kg dry		NA	20
<u>Duplicate (BYK0566-DUP2)</u>		Source: 15K0449-03		Prepared & Analyzed: 11/19/2015			
TPH-Volatiles (GRO)	<0.10 mg/kg wet	0.10	mg/kg wet	<0.10 mg/kg wet		NA	20
<u>Matrix Spike (BYK0566-MS1)</u>		Source: 15K0449-03		Prepared & Analyzed: 11/20/2015			
TPH-Volatiles (GRO)	0.91 mg/kg wet	0.10	mg/kg wet	0.998 <0.10 mg/kg wet	90.9 70-130		
<u>Matrix Spike Dup (BYK0566-MSD1)</u>		Source: 15K0449-03		Prepared & Analyzed: 11/20/2015			
TPH-Volatiles (GRO)	0.79 mg/kg wet	0.10	mg/kg wet	0.965 <0.10 mg/kg wet	82.0 70-130	13.5	20



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0595 - SW5030B

<u>Blank (BYK0595-BLK1)</u>		Prepared & Analyzed: 11/20/2015				
Benzene	<1.00 ug/L	1.00	ug/L			
Ethylbenzene	<1.00 ug/L	1.00	ug/L			
m+p-Xylenes	<2.00 ug/L	2.00	ug/L			
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L			
Naphthalene	<1.00 ug/L	1.00	ug/L			
o-Xylene	<1.00 ug/L	1.00	ug/L			
Toluene	<1.00 ug/L	1.00	ug/L			
Xylenes, Total	<3.00 ug/L	3.00	ug/L			
<i>Surr: 1,2-Dichloroethane-d4</i>	53.5		ug/L	50.0	107	70-120
<i>Surr: 4-Bromofluorobenzene</i>	44.1		ug/L	50.0	88.1	75-120
<i>Surr: Dibromofluoromethane</i>	48.8		ug/L	50.0	97.7	80-119
<i>Surr: Toluene-d8</i>	49.7		ug/L	50.0	99.4	85-120

<u>LCS (BYK0595-BS1)</u>		Prepared & Analyzed: 11/20/2015				
Benzene	50.8 ug/L	1	ug/L	50.0	102	80-120
Ethylbenzene	51.0 ug/L	1	ug/L	50.0	102	75-125
m+p-Xylenes	109 ug/L	2	ug/L	100	109	75-130
Methyl-t-butyl ether (MTBE)	46.8 ug/L	1	ug/L	50.0	93.7	65-125
Naphthalene	62.0 ug/L	1	ug/L	50.0	124	55-140
o-Xylene	54.6 ug/L	1	ug/L	50.0	109	80-120
Toluene	49.7 ug/L	1	ug/L	50.0	99.3	75-120
<i>Surr: 1,2-Dichloroethane-d4</i>	51.7		ug/L	50.0	103	70-120
<i>Surr: 4-Bromofluorobenzene</i>	46.2		ug/L	50.0	92.5	75-120
<i>Surr: Dibromofluoromethane</i>	49.9		ug/L	50.0	99.8	80-119
<i>Surr: Toluene-d8</i>	49.7		ug/L	50.0	99.3	85-120

<u>LCS Dup (BYK0595-BSD1)</u>		Prepared & Analyzed: 11/20/2015				
Benzene	50.5 ug/L	1	ug/L	50.0	101	80-120
Ethylbenzene	51.1 ug/L	1	ug/L	50.0	102	75-125
m+p-Xylenes	108 ug/L	2	ug/L	100	108	75-130
Methyl-t-butyl ether (MTBE)	50.3 ug/L	1	ug/L	50.0	101	65-125
Naphthalene	61.9 ug/L	1	ug/L	50.0	124	55-140



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BYK0595 - SW5030B

LCS Dup (BYK0595-BSD1)									
Prepared & Analyzed: 11/20/2015									
o-Xylene	55.1 ug/L	1	ug/L	50.0	110	80-120	0.775	30	
Toluene	49.5 ug/L	1	ug/L	50.0	99.0	75-120	0.359	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	52.5		ug/L	50.0	105	70-120			
<i>Surr: 4-Bromofluorobenzene</i>	46.0		ug/L	50.0	92.1	75-120			
<i>Surr: Dibromofluoromethane</i>	49.5		ug/L	50.0	98.9	80-119			
<i>Surr: Toluene-d8</i>	48.0		ug/L	50.0	96.0	85-120			

Duplicate (BYK0595-DUP1)									
Source: 15K0471-02RE1 Prepared & Analyzed: 11/20/2015									
Benzene	6.92 ug/L	1.00	ug/L	6.48 ug/L		6.49	30		
Ethylbenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30		
m+p-Xylenes	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30	J	
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30		
Naphthalene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30		
o-Xylene	2.33 ug/L	1.00	ug/L	2.52 ug/L		7.51	30		
Toluene	2.17 ug/L	1.00	ug/L	2.18 ug/L		0.276	30		
Xylenes, Total	3.13 ug/L	3.00	ug/L	3.42 ug/L		8.94	30		
<i>Surr: 1,2-Dichloroethane-d4</i>	55.6		ug/L	50.0	111	70-120			
<i>Surr: 4-Bromofluorobenzene</i>	45.1		ug/L	50.0	90.3	75-120			
<i>Surr: Dibromofluoromethane</i>	47.9		ug/L	50.0	95.7	80-119			
<i>Surr: Toluene-d8</i>	50.7		ug/L	50.0	101	85-120			

Matrix Spike (BYK0595-MS1)									
Source: 15K0390-10 Prepared & Analyzed: 11/20/2015									
Benzene	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.0	80-120		
Ethylbenzene	48.7 ug/L	1	ug/L	50.0	<1 ug/L	97.3	75-125		
m+p-Xylenes	103 ug/L	2	ug/L	100	<2 ug/L	103	75-130		
Methyl-t-butyl ether (MTBE)	47.9 ug/L	1	ug/L	50.0	<1 ug/L	95.7	65-125		
Naphthalene	60.6 ug/L	1	ug/L	50.0	<1 ug/L	121	55-140		
o-Xylene	52.5 ug/L	1	ug/L	50.0	<1 ug/L	105	80-120		
Toluene	47.8 ug/L	1	ug/L	50.0	<1 ug/L	95.6	75-120		
<i>Surr: 1,2-Dichloroethane-d4</i>	54.2		ug/L	50.0		108	70-120		
<i>Surr: 4-Bromofluorobenzene</i>	46.7		ug/L	50.0		93.5	75-120		



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0595 - SW5030B

Matrix Spike (BYK0595-MS1)	Source: 15K0390-10		Prepared & Analyzed: 11/20/2015					
Surr: Dibromofluoromethane	52.2		ug/L	50.0		104	80-119	
Surr: Toluene-d8	48.9		ug/L	50.0		97.8	85-120	
Matrix Spike Dup (BYK0595-MSD1)								
Benzene	51.3 ug/L	1	ug/L	50.0 <1 ug/L	103	80-120	4.51	30
Ethylbenzene	51.1 ug/L	1	ug/L	50.0 <1 ug/L	102	75-125	4.91	30
m+p-Xylenes	108 ug/L	2	ug/L	100 <2 ug/L	108	75-130	4.74	30
Methyl-t-butyl ether (MTBE)	50.8 ug/L	1	ug/L	50.0 <1 ug/L	102	65-125	6.04	30
Naphthalene	63.7 ug/L	1	ug/L	50.0 <1 ug/L	127	55-140	4.94	30
o-Xylene	54.2 ug/L	1	ug/L	50.0 <1 ug/L	108	80-120	3.12	30
Toluene	49.9 ug/L	1	ug/L	50.0 <1 ug/L	99.8	75-120	4.33	30
Surr: 1,2-Dichloroethane-d4	52.3		ug/L	50.0		105	70-120	
Surr: 4-Bromofluorobenzene	47.0		ug/L	50.0		94.0	75-120	
Surr: Dibromofluoromethane	50.7		ug/L	50.0		101	80-119	
Surr: Toluene-d8	49.0		ug/L	50.0		98.0	85-120	

Batch BYK0600 - SW5030B

Blank (BYK0600-BLK1)	Prepared & Analyzed: 11/19/2015					
Benzene	<5.00 ug/kg wet	5.00	ug/kg wet			
Ethylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet			
m+p-Xylenes	<5.00 ug/kg wet	5.00	ug/kg wet			
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg wet	5.00	ug/kg wet			
Naphthalene	<5.00 ug/kg wet	5.00	ug/kg wet			
o-Xylene	<5.00 ug/kg wet	5.00	ug/kg wet			
Toluene	<5.00 ug/kg wet	5.00	ug/kg wet			
Xylenes, Total	<15.0 ug/kg wet	15.0	ug/kg wet			
Surr: 1,2-Dichloroethane-d4	47.2		ug/kg wet	49.9		94.7 80-120
Surr: 4-Bromofluorobenzene	47.3		ug/kg wet	49.9		94.7 85-120
Surr: Dibromofluoromethane	48.5		ug/kg wet	49.9		97.1 78-119
Surr: Toluene-d8	50.4		ug/kg wet	49.9		101 85-115



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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0600 - SW5030B

LCS (BYK0600-BS1)						
Prepared & Analyzed: 11/19/2015						
Benzene	52.5 ug/L	5	ug/L	50.0	105	75-125
Ethylbenzene	45.2 ug/L	5	ug/L	50.0	90.4	75-125
m+p-Xylenes	95.3 ug/L	5	ug/L	100	95.3	80-125
Methyl-t-butyl ether (MTBE)	53.5 ug/L	5	ug/L	50.0	107	65-125
Naphthalene	52.7 ug/L	5	ug/L	50.0	105	40-125
o-Xylene	49.3 ug/L	5	ug/L	50.0	98.6	75-125
Toluene	50.7 ug/L	5	ug/L	50.0	101	70-125
<i>Surr: 1,2-Dichloroethane-d4</i>	49.0		ug/kg wet	50.0	98.0	80-120
<i>Surr: 4-Bromofluorobenzene</i>	49.5		ug/kg wet	50.0	98.9	85-120
<i>Surr: Dibromofluoromethane</i>	47.5		ug/kg wet	50.0	95.1	78-119
<i>Surr: Toluene-d8</i>	49.0		ug/kg wet	50.0	98.0	85-115

LCS Dup (BYK0600-BSD1)						
Prepared & Analyzed: 11/19/2015						
Benzene	56.5 ug/L	5	ug/L	50.0	113	75-125
Ethylbenzene	48.0 ug/L	5	ug/L	50.0	96.1	75-125
m+p-Xylenes	101 ug/L	5	ug/L	100	101	80-125
Methyl-t-butyl ether (MTBE)	55.5 ug/L	5	ug/L	50.0	111	65-125
Naphthalene	54.4 ug/L	5	ug/L	50.0	109	40-125
o-Xylene	52.1 ug/L	5	ug/L	50.0	104	75-125
Toluene	53.7 ug/L	5	ug/L	50.0	107	70-125
<i>Surr: 1,2-Dichloroethane-d4</i>	48.2		ug/kg wet	49.7	96.9	80-120
<i>Surr: 4-Bromofluorobenzene</i>	48.2		ug/kg wet	49.7	96.9	85-120
<i>Surr: Dibromofluoromethane</i>	49.5		ug/kg wet	49.7	99.5	78-119
<i>Surr: Toluene-d8</i>	49.9		ug/kg wet	49.7	100	85-115

Duplicate (BYK0600-DUP1)						
Source: 15K0352-05						Prepared & Analyzed: 11/19/2015
Benzene	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30
Ethylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30
m+p-Xylenes	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30
Naphthalene	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30
o-Xylene	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet	NA	30



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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0600 - SW5030B

Duplicate (BYK0600-DUP1)		Source: 15K0352-05		Prepared & Analyzed: 11/19/2015			
Toluene	<5.00 ug/kg wet	5.00	ug/kg wet	<5.00 ug/kg wet		NA	30
Xylenes, Total	<15.0 ug/kg wet	15.0	ug/kg wet	<15.0 ug/kg wet		NA	30
Surr: 1,2-Dichloroethane-d4	49.7		ug/kg wet	48.8	102	80-120	
Surr: 4-Bromofluorobenzene	47.0		ug/kg wet	48.8	96.3	85-120	
Surr: Dibromofluoromethane	47.0		ug/kg wet	48.8	96.2	78-119	
Surr: Toluene-d8	50.5		ug/kg wet	48.8	103	85-115	
Duplicate (BYK0600-DUP2)		Source: 15K0390-02RE1		Prepared & Analyzed: 11/20/2015			
Benzene	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
Ethylbenzene	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
m+p-Xylenes	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
Methyl-t-butyl ether (MTBE)	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
Naphthalene	<7.02 ug/kg dry	7.02	ug/kg dry	<7.02 ug/kg dry		NA	30
o-Xylene	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
Toluene	<351 ug/kg dry	351	ug/kg dry	<351 ug/kg dry		NA	30
Xylenes, Total	<21.1 ug/kg dry	21.1	ug/kg dry	<21.1 ug/kg dry		NA	30
Surr: 1,2-Dichloroethane-d4	54.0		ug/kg dry	51.0	106	80-120	
Surr: 4-Bromofluorobenzene	45.0		ug/kg dry	51.0	88.2	85-120	
Surr: Dibromofluoromethane	51.6		ug/kg dry	51.0	101	78-119	
Surr: Toluene-d8	50.5		ug/kg dry	51.0	99.2	85-115	
Matrix Spike (BYK0600-MS1)		Source: 15K0352-08		Prepared & Analyzed: 11/19/2015			
Benzene	30.3 ug/L	5	ug/L	50.0 <5 ug/L	60.6	75-125	M
Ethylbenzene	24.4 ug/L	5	ug/L	50.0 <5 ug/L	48.7	75-125	M
m+p-Xylenes	48.6 ug/L	5	ug/L	100 <5 ug/L	48.6	80-125	M
Methyl-t-butyl ether (MTBE)	31.2 ug/L	5	ug/L	50.0 <5 ug/L	62.3	65-125	M
Naphthalene	11.7 ug/L	5	ug/L	50.0 <5 ug/L	22.6	40-125	M
o-Xylene	25.6 ug/L	5	ug/L	50.0 <5 ug/L	50.8	75-125	M
Toluene	27.9 ug/L	5	ug/L	50.0 <5 ug/L	55.7	70-125	M
Surr: 1,2-Dichloroethane-d4	50.7		ug/kg wet	47.3	107	80-120	
Surr: 4-Bromofluorobenzene	44.0		ug/kg wet	47.3	92.9	85-120	



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3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BYK0600 - SW5030B

Matrix Spike (BYK0600-MS1)		Source: 15K0352-08		Prepared & Analyzed: 11/19/2015					
Surr: Dibromofluoromethane	48.2		ug/kg wet	47.3		102	78-119		
Surr: Toluene-d8	46.4		ug/kg wet	47.3		98.0	85-115		
Matrix Spike Dup (BYK0600-MSD1)		Source: 15K0352-08		Prepared & Analyzed: 11/19/2015					
Benzene	22.5 ug/L	5	ug/L	50.0 <5 ug/L	45.1	75-125	29.3	30	M
Ethylbenzene	16.6 ug/L	5	ug/L	50.0 <5 ug/L	33.2	75-125	38.0	30	M, P
m+p-Xylenes	33.1 ug/L	5	ug/L	100 <5 ug/L	33.1	80-125	37.8	30	P, M
Methyl-t-butyl ether (MTBE)	29.9 ug/L	5	ug/L	50.0 <5 ug/L	59.8	65-125	4.14	30	M
Naphthalene	11.7 ug/L	5	ug/L	50.0 <5 ug/L	22.6	40-125	0.0598	30	M
o-Xylene	18.4 ug/L	5	ug/L	50.0 <5 ug/L	36.4	75-125	32.7	30	M, P
Toluene	19.7 ug/L	5	ug/L	50.0 <5 ug/L	39.5	70-125	34.1	30	M, P
Surr: 1,2-Dichloroethane-d4	55.9		ug/kg wet	48.6		115	80-120		
Surr: 4-Bromofluorobenzene	46.2		ug/kg wet	48.6		95.0	85-120		
Surr: Dibromofluoromethane	49.5		ug/kg wet	48.6		102	78-119		
Surr: Toluene-d8	49.8		ug/kg wet	48.6		102	85-115		



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Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0637 - SW3550C

Blank (BYK0637-BLK1) Prepared & Analyzed: 11/23/2015

1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet						
1,2,4-Trichlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet						
1,2-Dichlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet						
1,2-Diphenylhydrazine	<83.3 ug/kg wet	83.3	ug/kg wet						
1,3-Dichlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet						
1,4-Dichlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet						
1-Chloronaphthalene	<83.3 ug/kg wet	83.3	ug/kg wet						
1-Naphthylamine	<83.3 ug/kg wet	83.3	ug/kg wet						
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4,5-Trichlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4,6-Trichlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4-Dichlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4-Dimethylphenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4-Dinitrophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,4-Dinitrotoluene	<83.3 ug/kg wet	83.3	ug/kg wet						
2,6-Dichlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2,6-Dinitrotoluene	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Chloronaphthalene	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Chlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Methylnaphthalene	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Naphthylamine	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Nitroaniline	<83.3 ug/kg wet	83.3	ug/kg wet						
2-Nitrophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
3,3'-Dichlorobenzidine	<83.3 ug/kg wet	83.3	ug/kg wet						
3-Methylcholanthrene	<83.3 ug/kg wet	83.3	ug/kg wet						
3-Nitroaniline	<83.3 ug/kg wet	83.3	ug/kg wet						
4,6-Dinitro-2-methylphenol	<83.3 ug/kg wet	83.3	ug/kg wet						
4-Aminobiphenyl	<83.3 ug/kg wet	83.3	ug/kg wet						
4-Bromophenyl phenyl ether	<83.3 ug/kg wet	83.3	ug/kg wet						
4-Chloroaniline	<83.3 ug/kg wet	83.3	ug/kg wet						
4-Chlorophenyl phenyl ether	<83.3 ug/kg wet	83.3	ug/kg wet						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0637 - SW3550C

Blank (BYK0637-BLK1) Prepared & Analyzed: 11/23/2015

4-Nitroaniline	<83.3 ug/kg wet	83.3	ug/kg wet						
4-Nitrophenol	<83.3 ug/kg wet	83.3	ug/kg wet						
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg wet	83.3	ug/kg wet						
Acenaphthene	<83.3 ug/kg wet	83.3	ug/kg wet						
Acenaphthylene	<83.3 ug/kg wet	83.3	ug/kg wet						
Acetophenone	<83.3 ug/kg wet	83.3	ug/kg wet						
Aniline	<83.3 ug/kg wet	83.3	ug/kg wet						
Anthracene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzidine	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzo (a) anthracene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzo (a) pyrene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzo (b) fluoranthene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzo (g,h,i) perylene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzo (k) fluoranthene	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzoic acid	<83.3 ug/kg wet	83.3	ug/kg wet						
Benzyl alcohol	<83.3 ug/kg wet	83.3	ug/kg wet						
bis (2-Chloroethoxy) methane	<83.3 ug/kg wet	83.3	ug/kg wet						
bis (2-Chloroethyl) ether	<83.3 ug/kg wet	83.3	ug/kg wet						
bis (2-Chloroisopropyl) ether	<83.3 ug/kg wet	83.3	ug/kg wet						
bis (2-Ethylhexyl) phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Butyl benzyl phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Chrysene	<83.3 ug/kg wet	83.3	ug/kg wet						
Dibenz (a,h) anthracene	<83.3 ug/kg wet	83.3	ug/kg wet						
Dibenz (a,j) acridine	<83.3 ug/kg wet	83.3	ug/kg wet						
Dibenzofuran	<83.3 ug/kg wet	83.3	ug/kg wet						
Diethyl phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Dimethyl phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Di-n-butyl phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Di-n-octyl phthalate	<83.3 ug/kg wet	83.3	ug/kg wet						
Diphenylamine	<83.3 ug/kg wet	83.3	ug/kg wet						
Ethyl methanesulfonate	<83.3 ug/kg wet	83.3	ug/kg wet						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0637 - SW3550C

Blank (BYK0637-BLK1)	Prepared & Analyzed: 11/23/2015							
Fluoranthene	<83.3 ug/kg wet	83.3	ug/kg wet					
Fluorene	<83.3 ug/kg wet	83.3	ug/kg wet					
Hexachlorobenzene	<83.3 ug/kg wet	83.3	ug/kg wet					
Hexachlorobutadiene	<83.3 ug/kg wet	83.3	ug/kg wet					
Hexachlorocyclopentadiene	<83.3 ug/kg wet	83.3	ug/kg wet					
Hexachloroethane	<83.3 ug/kg wet	83.3	ug/kg wet					
Indeno (1,2,3-cd) pyrene	<83.3 ug/kg wet	83.3	ug/kg wet					
Isophorone	<83.3 ug/kg wet	83.3	ug/kg wet					
m+p-Cresols	<83.3 ug/kg wet	83.3	ug/kg wet					
Methyl methanesulfonate	<83.3 ug/kg wet	83.3	ug/kg wet					
Naphthalene	<83.3 ug/kg wet	83.3	ug/kg wet					
Nitrobenzene	<83.3 ug/kg wet	83.3	ug/kg wet					
n-Nitrosodimethylamine	<83.3 ug/kg wet	83.3	ug/kg wet					
n-Nitrosodi-n-butylamine	<83.3 ug/kg wet	83.3	ug/kg wet					
n-Nitrosodi-n-propylamine	<83.3 ug/kg wet	83.3	ug/kg wet					
n-Nitrosodiphenylamine	<83.3 ug/kg wet	83.3	ug/kg wet					
n-Nitrosopiperidine	<83.3 ug/kg wet	83.3	ug/kg wet					
o+m+p-Cresols	<83.3 ug/kg wet	83.3	ug/kg wet					
o-Cresol	<83.3 ug/kg wet	83.3	ug/kg wet					
p-(Dimethylamino) azobenzene	<83.3 ug/kg wet	83.3	ug/kg wet					
p-Chloro-m-cresol	<83.3 ug/kg wet	83.3	ug/kg wet					
Pentachloronitrobenzene (quintozone)	<83.3 ug/kg wet	83.3	ug/kg wet					
Pentachlorophenol	<83.3 ug/kg wet	83.3	ug/kg wet					
Phenacetin	<83.3 ug/kg wet	83.3	ug/kg wet					
Phenanthrene	<83.3 ug/kg wet	83.3	ug/kg wet					
Phenol	<83.3 ug/kg wet	83.3	ug/kg wet					
Pronamide	<83.3 ug/kg wet	83.3	ug/kg wet					
Pyrene	<83.3 ug/kg wet	83.3	ug/kg wet					
Pyridine	<83.3 ug/kg wet	83.3	ug/kg wet					
<i>Surr: 2,4,6-Tribromophenol</i>	2190	ug/kg wet	3330		65.7	35-125		
<i>Surr: 2-Fluorobiphenyl</i>	1020	ug/kg wet	1670		61.0	45-105		



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BYK0637 - SW3550C

Blank (BYK0637-BLK1) Prepared & Analyzed: 11/23/2015						
Surr: 2-Fluorophenol	2140	ug/kg wet	3330		64.2	35-105
Surr: Nitrobenzene-d5	1120	ug/kg wet	1670		67.4	35-100
Surr: Phenol-d5	2060	ug/kg wet	3330		61.9	40-100
Surr: p-Terphenyl-d14	1450	ug/kg wet	1670		86.9	30-125

LCS (BYK0637-BS1) Prepared & Analyzed: 11/23/2015						
1,2,4-Trichlorobenzene	1010 ug/kg wet	83.3	ug/kg wet	3310	30.6	44-142 L
1,4-Dichlorobenzene	1130 ug/kg wet	83.3	ug/kg wet	3330	34.0	20-124
4-Nitrophenol	2290 ug/kg wet	83.3	ug/kg wet	6670	34.3	15-140
Acenaphthene	1030 ug/kg wet	83.3	ug/kg wet	3320	31.0	45-110 L
n-Nitrosodi-n-propylamine	1180 ug/kg wet	83.3	ug/kg wet	3320	35.6	40-115 L
Pentachlorophenol	2720 ug/kg wet	83.3	ug/kg wet	6600	41.3	25-120
Phenol	2170 ug/kg wet	83.3	ug/kg wet	6670	32.6	40-100 L
Pyrene	996 ug/kg wet	83.3	ug/kg wet	3330	29.9	45-125 L
Surr: 2,4,6-Tribromophenol	2610	ug/kg wet	3330		78.4	35-125
Surr: 2-Fluorobiphenyl	1080	ug/kg wet	1670		64.6	45-105
Surr: 2-Fluorophenol	2350	ug/kg wet	3330		70.5	35-105
Surr: Nitrobenzene-d5	1180	ug/kg wet	1670		70.8	35-100
Surr: Phenol-d5	2250	ug/kg wet	3330		67.5	40-100
Surr: p-Terphenyl-d14	1480	ug/kg wet	1670		88.8	30-125

Matrix Spike (BYK0637-MS1) Source: 15K0390-11 Prepared & Analyzed: 11/23/2015						
1,2,4-Trichlorobenzene	702 ug/kg dry	116	ug/kg dry	4620 <116 ug/kg dry	15.2	44-142 M
1,4-Dichlorobenzene	684 ug/kg dry	116	ug/kg dry	4650 <116 ug/kg dry	14.7	20-124 M
4-Nitrophenol	2110 ug/kg dry	116	ug/kg dry	9300 <116 ug/kg dry	22.7	15-140
Acenaphthene	792 ug/kg dry	116	ug/kg dry	4630 <116 ug/kg dry	17.1	45-110 M
n-Nitrosodi-n-propylamine	894 ug/kg dry	116	ug/kg dry	4630 <116 ug/kg dry	19.3	40-115 M
Pentachlorophenol	2440 ug/kg dry	116	ug/kg dry	9210 <116 ug/kg dry	26.4	25-120
Phenol	1470 ug/kg dry	116	ug/kg dry	9300 <116 ug/kg dry	15.8	40-100 M
Pyrene	1140 ug/kg dry	116	ug/kg dry	4650 <116 ug/kg dry	24.5	45-125 M
Surr: 2,4,6-Tribromophenol	2190		ug/kg dry	4650	47.1	35-125



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BYK0637 - SW3550C

Matrix Spike (BYK0637-MS1)		Source: 15K0390-11		Prepared & Analyzed: 11/23/2015						
Surr: 2-Fluorobiphenyl	786		ug/kg dry	2330		33.8	45-105			S
Surr: 2-Fluorophenol	1400		ug/kg dry	4650		30.0	35-105			S
Surr: Nitrobenzene-d5	810		ug/kg dry	2330		34.8	35-100			S
Surr: Phenol-d5	1500		ug/kg dry	4650		32.2	40-100			S
Surr: p-Terphenyl-d14	1690		ug/kg dry	2330		72.8	30-125			
Matrix Spike Dup (BYK0637-MSD1)		Source: 15K0390-11		Prepared & Analyzed: 11/23/2015						
1,2,4-Trichlorobenzene	1200 ug/kg dry	118	ug/kg dry	4690 <118 ug/kg dry	25.6	44-142	52.3	20	M, P	
1,4-Dichlorobenzene	1320 ug/kg dry	118	ug/kg dry	4710 <118 ug/kg dry	28.1	20-124	63.6	20	P	
4-Nitrophenol	3050 ug/kg dry	118	ug/kg dry	9430 <118 ug/kg dry	32.4	15-140	36.4	20	P	
Acenaphthene	1230 ug/kg dry	118	ug/kg dry	4690 <118 ug/kg dry	26.1	45-110	43.1	20	M, P	
n-Nitrosodi-n-propylamine	1390 ug/kg dry	118	ug/kg dry	4700 <118 ug/kg dry	29.6	40-115	43.4	20	M, P	
Pentachlorophenol	3510 ug/kg dry	118	ug/kg dry	9330 <118 ug/kg dry	37.6	25-120	36.1	20	P	
Phenol	2540 ug/kg dry	118	ug/kg dry	9430 <118 ug/kg dry	26.9	40-100	53.2	20	M, P	
Pyrene	1400 ug/kg dry	118	ug/kg dry	4710 <118 ug/kg dry	29.7	45-125	20.6	20	M, P	
Surr: 2,4,6-Tribromophenol	3140		ug/kg dry	4710		66.6	35-125			
Surr: 2-Fluorobiphenyl	1280		ug/kg dry	2360		54.1	45-105			
Surr: 2-Fluorophenol	2730		ug/kg dry	4710		57.8	35-105			
Surr: Nitrobenzene-d5	1360		ug/kg dry	2360		57.6	35-100			
Surr: Phenol-d5	2570		ug/kg dry	4710		54.5	40-100			
Surr: p-Terphenyl-d14	2040		ug/kg dry	2360		86.7	30-125			



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Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPLimits	RPD RPD	Limit Qual
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Batch BYK0594 - SW8100

Blank (BYK0594-BLK1)									
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet	Prepared: 11/20/2015 Analyzed: 11/23/2015					
Surr: Pentacosane	2.88		mg/kg wet	4.91	58.5	40-160			
LCS (BYK0594-BS1)									
TPH-Semi-Volatiles (DRO)	59.7 mg/kg wet	10.0	mg/kg wet	99.2	60.1	40-160			
Surr: Pentacosane	3.04		mg/kg wet	4.96	61.2	40-160			
Matrix Spike (BYK0594-MS1)									
TPH-Semi-Volatiles (DRO)	84.0 mg/kg dry	12.9	mg/kg dry	129 <12.9 mg/kg dry	65.2	40-160			
Surr: Pentacosane	4.25		mg/kg dry	6.44	66.0	40-160			
Matrix Spike Dup (BYK0594-MSD1)									
TPH-Semi-Volatiles (DRO)	77.1 mg/kg dry	12.8	mg/kg dry	128 <12.8 mg/kg dry	60.3	40-160	8.53	20	
Surr: Pentacosane	3.88		mg/kg dry	6.39	60.7	40-160			

Batch BYK0646 - SW8100

Blank (BYK0646-BLK1)									
TPH-Semi-Volatiles (DRO)	<0.50 mg/L	0.50	mg/L	Prepared & Analyzed: 11/23/2015					
Surr: Pentacosane	0.195		mg/L	0.250	77.9	40-160			
LCS (BYK0646-BS1)									
TPH-Semi-Volatiles (DRO)	3.6 mg/L	0.50	mg/L	5.00	72.3	40-160			
Surr: Pentacosane	0.212		mg/L	0.250	84.7	40-160			
Matrix Spike (BYK0646-MS1)									
TPH-Semi-Volatiles (DRO)	3.3 mg/L	0.50	mg/L	5.10 <0.50 mg/L	64.3	40-160			
Surr: Pentacosane	0.217		mg/L	0.255	85.1	40-160			



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BYK0646 - SW8100

Matrix Spike Dup (BYK0646-MSD1)		Source: 15K0401-02		Prepared: 11/23/2015 Analyzed: 11/24/2015						
TPH-Semi-Volatiles (DRO)		3.7 mg/L	0.50	mg/L	5.10	<0.50 mg/L	71.8	40-160	10.9	20
<i>Surr: Pentacosane</i>		0.219		mg/L	0.255		86.0	40-160		



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Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BYK0671 - SW3550B

<u>Blank (BYK0671-BLK1)</u>		Prepared: 11/23/2015 Analyzed: 11/24/2015					
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet				
<i>Surr: DCB</i>	0.0300		mg/kg wet	0.0315		95.0	30-105
<i>Surr: TCMX</i>	0.0268		mg/kg wet	0.0315		85.0	30-105
<u>LCS (BYK0671-BS2)</u>		Prepared: 11/23/2015 Analyzed: 11/24/2015					
PCB as Aroclor 1016	0.186 mg/kg wet	0.100	mg/kg wet	0.148		126	60-140
PCB as Aroclor 1260	0.142 mg/kg wet	0.100	mg/kg wet	0.148		96.0	60-140
<i>Surr: DCB</i>	0.0266		mg/kg wet	0.0296		90.0	30-105
<i>Surr: TCMX</i>	0.0266		mg/kg wet	0.0296		90.0	30-105
<u>Matrix Spike (BYK0671-MS2)</u>		Source: 15K0390-11 Prepared: 11/23/2015 Analyzed: 11/24/2015					
PCB as Aroclor 1016	0.240 mg/kg dry	0.141	mg/kg dry	0.236	<0.141 mg/kg dry	102	60-140
PCB as Aroclor 1260	0.170 mg/kg dry	0.141	mg/kg dry	0.236	<0.141 mg/kg dry	72.0	60-140
<i>Surr: DCB</i>	0.0306		mg/kg dry	0.0471		65.0	30-105
<i>Surr: TCMX</i>	0.0471		mg/kg dry	0.0471		100	30-105
<u>Matrix Spike Dup (BYK0671-MSD2)</u>		Source: 15K0390-11 Prepared: 11/23/2015 Analyzed: 11/24/2015					
PCB as Aroclor 1016	0.240 mg/kg dry	0.141	mg/kg dry	0.236	<0.141 mg/kg dry	102	60-140
PCB as Aroclor 1260	0.167 mg/kg dry	0.141	mg/kg dry	0.236	<0.141 mg/kg dry	71.0	60-140
<i>Surr: DCB</i>	0.0306		mg/kg dry	0.0471		65.0	30-105
<i>Surr: TCMX</i>	0.0424		mg/kg dry	0.0471		90.0	30-105



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Certificate of Analysis

Final Report

Client Name: Groundwater Environmental Services, Inc.-R Date Received: November 17, 2015 16:15
3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]

Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	------------

Batch BYK0572 - No Prep Halides

Blank (BYK0572-BLK1)		Prepared & Analyzed: 11/19/2015						
Percent Solids	100 %	0.10	%					
Duplicate (BYK0572-DUP1)		Source: 15K0390-01 Prepared & Analyzed: 11/19/2015						
Percent Solids	77.4 %	0.10	%	77.3 %		0.106		20
Duplicate (BYK0572-DUP2)		Source: 15K0390-05 Prepared & Analyzed: 11/19/2015						
Percent Solids	79.9 %	0.10	%	80.8 %		1.11		20



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		Date Issued:	November 24, 2015 17:24
Submitted To:	Daniel Breckenridge	Project Number:	[none]
Client Site I.D.:	Sheetz - Burlington Phase II Follow-up	Purchase Order:	

Certified Analyses included in this Report

Analyte	Certifications
<i>SW6010C in Non-Potable Water</i>	
Arsenic	VELAP,NC,WVDEP
Barium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC,WVDEP
Lead	VELAP,NC,WVDEP
Selenium	VELAP,NC,WVDEP
Silver	VELAP,NC
<i>SW6010C in Solids</i>	
Arsenic	VELAP,NC
Barium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC
Lead	VELAP,NC,WVDEP
Selenium	VELAP,NC,WVDEP
Silver	VELAP,NC,WVDEP
<i>SW7470A in Non-Potable Water</i>	
Mercury	VELAP,NC,WVDEP
<i>SW7471B in Solids</i>	
Mercury	VELAP,WVDEP
<i>SW8015C in Non-Potable Water</i>	
TPH-Semi-Volatiles (DRO)	VELAP,NC,WVDEP
TPH-Volatiles (GRO)	VELAP,NC,WVDEP
<i>SW8015C in Solids</i>	
TPH-Semi-Volatiles (DRO)	VELAP,NC,WVDEP
TPH-Volatiles (GRO)	VELAP,NC,WVDEP
<i>SW8082A in Solids</i>	
PCB as Aroclor 1016	VELAP,NC
PCB as Aroclor 1221	VELAP,NC
PCB as Aroclor 1232	VELAP,NC
PCB as Aroclor 1242	VELAP,NC
PCB as Aroclor 1248	VELAP,NC
PCB as Aroclor 1254	VELAP,NC
PCB as Aroclor 1260	VELAP,NC
<i>SW8260B in Non-Potable Water</i>	
Benzene	VELAP



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		Date Issued:	November 24, 2015 17:24
Submitted To:	Daniel Breckenridge	Project Number:	[none]
Client Site I.D.:	Sheetz - Burlington Phase II Follow-up	Purchase Order:	

Certified Analyses included in this Report

Analyte	Certifications
Ethylbenzene	VELAP
m+p-Xylenes	VELAP
Methyl-t-butyl ether (MTBE)	VELAP
Naphthalene	VELAP
o-Xylene	VELAP
Toluene	VELAP
Xylenes, Total	VELAP
SW8260B in Solids	
Benzene	VELAP,NC
Ethylbenzene	VELAP,NC
m+p-Xylenes	VELAP,NC
Methyl-t-butyl ether (MTBE)	VELAP,NC
Naphthalene	VELAP,NC
o-Xylene	VELAP,NC
Toluene	VELAP,NC
Xylenes, Total	VELAP,NC
Dibromofluoromethane	VELAP
SW8270D in Solids	
1,2,4,5-Tetrachlorobenzene	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Diphenylhydrazine	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
1-Chloronaphthalene	NC,VELAP,WVDEP
1-Naphthylamine	NC,VELAP,WVDEP
2,3,4,6-Tetrachlorophenol	NC,VELAP,WVDEP
2,4,5-Trichlorophenol	NC,VELAP,WVDEP
2,4,6-Trichlorophenol	NC,VELAP,WVDEP
2,4-Dichlorophenol	NC,VELAP,WVDEP
2,4-Dimethylphenol	NC,VELAP,WVDEP
2,4-Dinitrophenol	NC,VELAP,WVDEP
2,4-Dinitrotoluene	NC,VELAP,WVDEP
2,6-Dichlorophenol	NC,VELAP,WVDEP
2,6-Dinitrotoluene	NC,VELAP,WVDEP
2-Chloronaphthalene	NC,VELAP,WVDEP
2-Chlorophenol	NC,VELAP,WVDEP



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Client Site I.D.:	Sheetz - Burlington Phase II Follow-up	Purchase Order:	

Certified Analyses included in this Report

Analyte	Certifications
2-Methylnaphthalene	NC, VELAP, WVDEP
2-Naphthylamine	NC, VELAP, WVDEP
2-Nitroaniline	NC, VELAP, WVDEP
2-Nitrophenol	NC, VELAP, WVDEP
3,3'-Dichlorobenzidine	NC, VELAP, WVDEP
3-Methylcholanthrene	NC, VELAP, WVDEP
3-Nitroaniline	NC, VELAP, WVDEP
4,6-Dinitro-2-methylphenol	NC, VELAP, WVDEP
4-Aminobiphenyl	NC, VELAP, WVDEP
4-Bromophenyl phenyl ether	NC, VELAP, WVDEP
4-Chloroaniline	NC, VELAP, WVDEP
4-Chlorophenyl phenyl ether	NC, VELAP, WVDEP
4-Nitroaniline	NC, VELAP, WVDEP
4-Nitrophenol	NC, VELAP, WVDEP
7,12-Dimethylbenz (a) anthracene	NC, VELAP, WVDEP
Acenaphthene	NC, VELAP, WVDEP
Acenaphthylene	NC, VELAP, WVDEP
Acetophenone	NC, VELAP, WVDEP
Aniline	NC, VELAP, WVDEP
Anthracene	NC, VELAP, WVDEP
Benzidine	NC, VELAP, WVDEP
Benzo (a) anthracene	NC, VELAP, WVDEP
Benzo (a) pyrene	NC, VELAP, WVDEP
Benzo (b) fluoranthene	NC, VELAP, WVDEP
Benzo (g,h,i) perylene	NC, VELAP, WVDEP
Benzo (k) fluoranthene	NC, VELAP, WVDEP
Benzoic acid	NC, VELAP, WVDEP
Benzyl alcohol	NC, VELAP, WVDEP
bis (2-Chloroethoxy) methane	NC, VELAP, WVDEP
bis (2-Chloroethyl) ether	NC, VELAP, WVDEP
bis (2-Chloroisopropyl) ether	NC, VELAP, WVDEP
bis (2-Ethylhexyl) phthalate	NC, VELAP, WVDEP
Butyl benzyl phthalate	NC, VELAP, WVDEP
Chrysene	NC, VELAP, WVDEP
Dibenz (a,h) anthracene	NC, VELAP, WVDEP
Dibenz (a,j) acridine	NC, VELAP, WVDEP
Dibenzofuran	NC, VELAP, WVDEP
Diethyl phthalate	NC, VELAP, WVDEP



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		Date Issued:	November 24, 2015 17:24
Submitted To:	Daniel Breckenridge	Project Number:	[none]
Client Site I.D.:	Sheetz - Burlington Phase II Follow-up	Purchase Order:	

Certified Analyses included in this Report

Analyte	Certifications
Dimethyl phthalate	NC, VELAP, WVDEP
Di-n-butyl phthalate	NC, VELAP, WVDEP
Di-n-octyl phthalate	NC, VELAP, WVDEP
Diphenylamine	NC, VELAP, WVDEP
Ethyl methanesulfonate	NC, VELAP, WVDEP
Fluoranthene	NC, VELAP, WVDEP
Fluorene	NC, VELAP, WVDEP
Hexachlorobenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Hexachlorocyclopentadiene	NC, VELAP, WVDEP
Hexachloroethane	NC, VELAP, WVDEP
Indeno (1,2,3-cd) pyrene	NC, VELAP, WVDEP
Isophorone	NC, VELAP, WVDEP
m+p-Cresols	NC, VELAP, WVDEP
Methyl methanesulfonate	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
Nitrobenzene	NC, VELAP, WVDEP
n-Nitrosodimethylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-butylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-propylamine	NC, VELAP, WVDEP
n-Nitrosodiphenylamine	NC, VELAP, WVDEP
n-Nitrosopiperidine	NC, VELAP, WVDEP
o+m+p-Cresols	NC, VELAP, WVDEP
o-Cresol	NC, VELAP, WVDEP
p-(Dimethylamino) azobenzene	NC, VELAP, WVDEP
p-Chloro-m-cresol	NC, VELAP, WVDEP
Pentachloronitrobenzene (quintozene)	NC, WVDEP
Pentachlorophenol	NC, VELAP, WVDEP
Phenacetin	NC, VELAP, WVDEP
Phenanthrene	NC, VELAP, WVDEP
Phenol	NC, VELAP, WVDEP
Pronamide	NC, VELAP, WVDEP
Pyrene	NC, VELAP, WVDEP
Pyridine	NC, VELAP, WVDEP



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3701 Saunders Ave. Date Issued: November 24, 2015 17:24
Richmond VA, 23227

Submitted To: Daniel Breckenridge Project Number: [none]
Client Site I.D.: Sheetz - Burlington Phase II Follow-up Purchase Order:

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2015
NC	North Carolina DENR	495	12/31/2015
VELAP	NELAC-Virginia Certificate #8074	460021	06/15/2016
WVDEP	West Virginia DEP	350	11/30/2015



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Certificate of Analysis

Final Report

Client Name:	Groundwater Environmental Services, Inc.-R 3701 Saunders Ave. Richmond VA, 23227	Date Received:	November 17, 2015 16:15
		Date Issued:	November 24, 2015 17:24
Submitted To:	Daniel Breckenridge	Project Number:	[none]
Client Site I.D.:	Sheetz - Burlington Phase II Follow-up	Purchase Order:	

Summary of Data Qualifiers

- C Continuing calibration verification response for this analyte is outside specifications.
- Cl Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.
- DS Surrogate concentration reflects a dilution factor.
- L LCS recovery is outside of established acceptance limits
- M Matrix spike recovery is outside established acceptance limits
- P Duplicate analysis does not meet the acceptance criteria for precision
- S Surrogate recovery was outside acceptance criteria
- RPD Relative Percent Difference
- Qual Qualifiers
- RE Denotes sample was re-analyzed
- D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.
- TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
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Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

PAGE 1 OF 2

CHAIN OF CUSTODY

COMPANY NAME: <u>GES</u>	INVOICE TO:	PROJECT NAME/Quote #:												
CONTACT: <u>D. Breckneridge</u>	INVOICE CONTACT:	SITE NAME: <u>Sheetz - Burlington Phase II</u>												
ADDRESS: <u>3701 Sawley Ave Richmond VA</u>	INVOICE ADDRESS:	PROJECT NUMBER: <u>Follow-up</u>												
PHONE #: <u>866-222-7786</u>	INVOICE PHONE #:	P.O. #:												
FAX #:	EMAIL:	Pretreatment Program:												
Is sample for compliance reporting? YES <u>NO</u>		Is sample from a chlorinated supply? YES <u>NO</u>	PWS I.D. #:											
SAMPLER NAME (PRINT): <u>Nick Braun</u>		SAMPLER SIGNATURE: <u>Nick Braun</u>	Turn Around Time: <u>STD</u> Day(s)											
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other _____		COMMENTS												
		Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol												
CLIENT SAMPLE I.D.		ANALYSIS / (PRESERVATIVE)												
1) <u>SS-1 (14-17)</u>	<input checked="" type="checkbox"/> Grab	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	BTEX, MTBE, Naphthalene	TPH-Cres	+PHT-DR ₂	RCA 8 Metals	SVOCs	PCB
2) <u>SS-2 (14-17)</u>	<input checked="" type="checkbox"/> Composite			<u>11/16/15</u>	<u>12:45</u>		<u>S</u>	<u>4</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
3) <u>SS-3 (14-17)</u>	<input checked="" type="checkbox"/> Field Filtered (Dissolved Metals)				<u>13:30</u>		<u>S</u>	<u>4</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
4) <u>SS-4 (12-15)</u>					<u>14:30</u>		<u>S</u>	<u>4</u>						
5) <u>SS-7 (15-17)</u>					<u>15:20</u>		<u>S</u>	<u>4</u>						
6) <u>SS-8 (15-17)</u>					<u>15:55</u>		<u>S</u>	<u>4</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
7)														
8)														
9)														
10).														
RELINQUISHED: <u>Nick Braun</u>	DATE / TIME <u>11/17/15 16:50</u>	RECEIVED: <u>11/17/15 16:15</u>	DATE / TIME <u>11/17/15 16:15</u>	QC Data Package	LAB USE ONLY	COOLER TEMP <u>4.6</u> °C								
RELINQUISHED: <u></u>	DATE / TIME <u></u>	RECEIVED: <u></u>	DATE / TIME <u></u>	Level I <input type="checkbox"/>										
RELINQUISHED: <u></u>	DATE / TIME <u></u>	RECEIVED: <u></u>	DATE / TIME <u></u>	Level II <input type="checkbox"/>										
RELINQUISHED: <u></u>	DATE / TIME <u></u>	RECEIVED: <u></u>	DATE / TIME <u></u>	Level III <input type="checkbox"/>										
RELINQUISHED: <u></u>	DATE / TIME <u></u>	RECEIVED: <u></u>	DATE / TIME <u></u>	Level IV <input type="checkbox"/>										

063051

GES-R 15K0390
Sheetz - Burlington Phase II Follow
Recd: 11/17/2015 Due: 11/24/2015



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Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

PAGE 2 OF 2

CHAIN OF CUSTODY

COMPANY NAME: <u>GES</u>	INVOICE TO:	PROJECT NAME/Quote #:
CONTACT: <u>D. Breckridge</u>	INVOICE CONTACT:	SITE NAME: <u>Sheetz-Burlington Phase II</u>
ADDRESS: <u>3701 Saunders Ave Richmond VA</u>	INVOICE ADDRESS:	PROJECT NUMBER: <u>Follow-up</u>
PHONE #: <u>804-222-7786</u>	INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL:	Pretreatment Program:

Is sample for compliance reporting? YES NO Is sample from a chlorinated supply? YES NO PWS I.D. #:

SAMPLER NAME (PRINT): Nick Braun SAMPLER SIGNATURE: Nick Braun Turn Around Time: 5 Day(s)

Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other

COMMENTS

CLIENT SAMPLE I.D.	Grab Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)						Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol	
									BTEX	MTBE	Naphthalene	Crude Oil	TPH - H ₂ O	Rept & Metals	SVOC's	PCBs
1) GW-1	X			11/17/15	7:45		W	7	X	X		X	X	X		
2) GW-2	X				8:15		W	7								
3) GW-3	X				8:45		W	7								
4) GW-4	X				9:15		W	7								
5) SS-9 (11-13)	X				9:30		W	4	X	X	X	X	X	X	X	
6) SS-6 (11-13)	X				10:10		S	6	X	X	X	X	X			
7) SS-5 (11-13)				11/17/15	10:45		S	6	X	X	X	X	X			
8) Trip Blank	X			11/10/15	9:30		S	4	X	X						
9)																
10)																

RELINQUISHED: <u>Nick Braun</u>	DATE / TIME: <u>11/17/15 16150</u>	RECEIVED: <u>Brian Bush</u>	DATE / TIME: <u>11/17/15 1650</u>	QC Data Package	LAB USE ONLY	COOLER TEMP <u>4.0</u> °C
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level I <input type="checkbox"/>		
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level II <input type="checkbox"/>		
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level III <input type="checkbox"/>		
				Level IV <input type="checkbox"/>		

15K0390

GES-R 15K0390

Sheetz - Burlington Phase II Follow

Recd: 11/17/2015 Due: 11/24/2015



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15K0390

GES-R 15K0390
Sheetz - Burlington Phase II Follow
Recd: 11/17/2015 Due: 11/24/2015

v130325002

Opened by: (Initials)

Lab ID No.:

Date Cooler Opened:

18 Nov 2015

Sample Conditions Checklist

1. How were samples received?

Fed Ex
UPS
Courier
Walk In

YES NO N/A

2. Were custody seals used?

3. If yes, are custody seals unbroken and intact at the date and time of arrival?

4. Are the custody papers filled out completely and correctly?

5. Do all bottle labels agree with custody papers?

7. Is the temperature blank or representative sample within acceptable limits?
(above freezing to 6°C)

8. If NO, are the samples just taken and received on ice?

9. Are all samples within holding time for requested laboratory tests?

10. Is a sufficient amount of sample provided to perform the tests indicated?

11. Are all samples in proper containers for the analyses requested?

12. Are all samples appropriately preserved for the analyses requested?

13. Are all volatile organic containers free of headspace?

14. Are all TOX containers free of headspace?

15. Is Trip blank provided with each VOC sample set? Circle applicable method:
(Document if trip blank is not received with the sample set)

EPA 8011

EPA 504

EPA 8260

EPA 624

RSK-175

EPA 8015 (GRO)

EPA 8021

EPA 524

*GRO Wisconsin DNR (water and/or methanol trip blank must be provided)

* See preservation log for Wisconsin soil DRO.

(SS-9 11-13) 11C 11-18-15

COMMENTS

Sample II is a soil not a water. The trip BLANK
is not a soil as indicated on the chain. Et 11-18-15

FOR LAB USE ONLY:

CrVI preserved date/time: _____

Buffer Sol'n ID: _____

Analyst Initials: _____

1N NaOH ID: _____ or

5N NaOH ID: _____

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED
F1302 Sample Condition 6_0.xls

